

CIO

GOALS GONE WILD

Can you be too ambitious? 38

DEPLOYING WINDOWS 7

Lessons from an early adopter 20

HIGH-TECH TURNAROUND

A college CIO sells infrastructure 15

SMARTPHONE SECURITY

5 tips for getting it right 21

what u c

versus

what u get

BY KIM S. NASH

Unified communications can save time, cut costs and boost collaboration.

The tricky part is choosing the right combination of tools. 28

PLUS

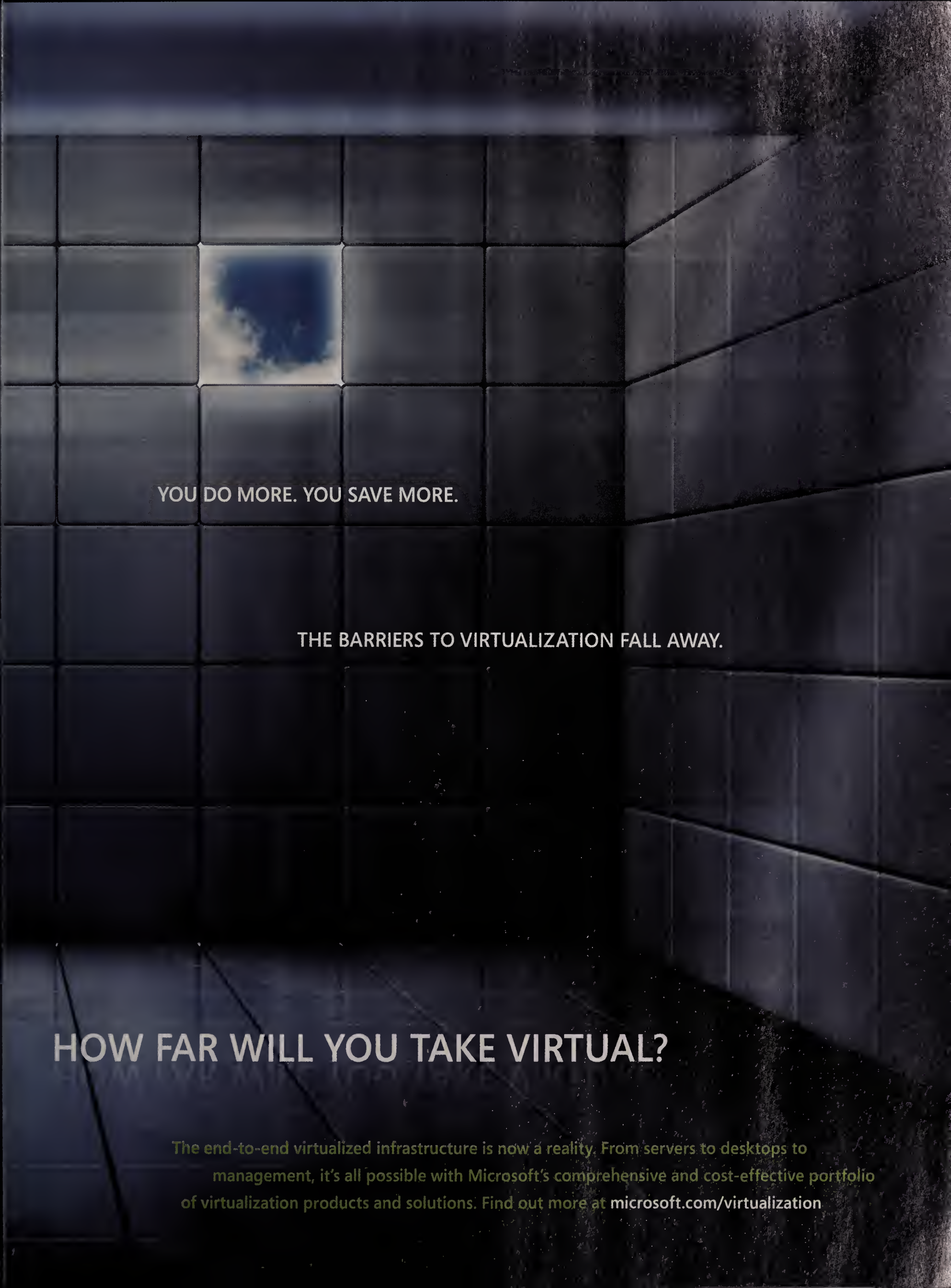
Banking on IT Resiliency

How IT helps the Fed respond to the economy 18

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Start

From the Editor in Chief **6**
 Chatter **6**
 From the CEO **8**
 News Scan **10**
 What We're Reading **12**



6



15

Grow

INNOVATION & BUSINESS VALUE
 How a college CIO sold infrastructure investments **15**
 Most reliable PC vendors **16**
 IT at the Federal Reserve **18**

Run

LEADERSHIP & OPERATIONAL EXCELLENCE
 Deploying Windows 7 **20**
 Tips for better smartphone security **21**
 Getting strategic value from offshore vendors **24**
 Protecting intellectual property rights **25**
 What makes your staff happy: job security **25**
 Hot Jobs: Java developer **26**



20



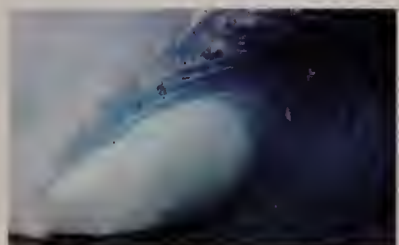
38

Thrive

YOUR LIFE & CAREER PATH
 The right way to set goals for your team **38**
 Effective online presentations **40**
 How one CIO is helping her home state save money **42**
 Avoiding social networking distractions **43**
 Hotel rooms a traveling techie will love **44**

Finish

Watching for tsunamis **48**
 Index **46**



48

What UC Versus What U Get **28**

COVER STORY Unified communications can save time, cut costs and boost collaboration. The tricky part is choosing the right combination of tools.

BY KIM S. NASH



Woods Bagot CIO **Nectaros Lazaris** says unified communications tools are helping the architectural design firm win new business.

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FROM THE
EDITOR IN CHIEF

start

Unifying Forces

The shimmering oasis called “unified communications” has been on IT horizons for so long, it’s almost surreal to think we might actually arrive there one day.

When you consider the ever-rapidly-multiplying number of communication pathways carving into our lives—from e-mail, IM and BlackBerrys to social media, desktop video conferencing and telepresence—plain vanilla voice mail does seem like a quaint throwback to a simpler time.

I caught myself the other day glancing down at the blinking red voice mail light on my phone and trying to remember what that meant. Oh, right. Dial in a code to listen to a message. Surely it could find its way to me, I thought, without so much aggravation.

And there it was—another tiny spark of user desire for that one simple interface. I could love a dashboard that gave me access to all my various communications, couldn’t you? Well, after reading our cover story (“What UC Versus What U Get,” Page 28) you won’t be holding your breath.

But still, CIOs are all over this UC stuff—if not with open checkbooks then at least with open minds. A recent Forrester study of 466 organizations counted one-third of them deploying “some form” of unified communications, and half of those still hesitating were actively investigating it.

The urban sprawl of the UC oasis has also grown in recent years, moving far beyond a “back-room effort” to run data and voice traffic on the same network into a much grander vision of employees sharing information via whatever device is in their hands or on boardroom tables or walls.

Yet it’s the user examples detailed in our story—from industries as diverse as health care, architecture and high-tech—that tell the most engaging part of the UC tale.

For example, one hospital center dramatically improved communication between medical practitioners by shrinking a 15-minute wait for physician pager responses to 15 seconds in its pilot of Vocera Communication’s badge devices. And the global collaboration potential of UC turned into a hard-dollars benefit for an architectural firm now saving \$450,000 in annual travel costs for board members who no longer have to trek to Sydney several times a year.

So are we really closer to that UC oasis or is this the nature of a good mirage? E-mail me and let me know what you think. But please, no more voice mails.

Maryfran Johnson, Editor in Chief, CIO Magazine & Events
mfjohnson@cio.com

CHATTER

Happier at Work

Despite having to cope with massive budget cuts, salary freezes and demoralized staffs, **most IT executives are more satisfied with their jobs this year** than they have been in previous years. One reason: Execs would rather have a so-so job than no job. CIO.com Senior Editor Meridith Levinson breaks down the numbers. www.cio.com/article/500230

The job is not, however, its own reward. You want to treat yourself when you’ve worked particularly hard. In “**Luxuries for Leaders: How IT Chiefs Reward Themselves**,” Levinson asks IT execs how they celebrate. Some take to the woods, others go for bling therapy. Find the slideshow at www.cio.com/article/500229

The Truth About Work Visas

The law that authorizes the H-1B and L-1 temporary work visas for foreign professionals is up for renewal, and rumors are swirling, as they always do at such times, about whether the proposed legislation **will be a cure for the job losses and salary declines** or if it’s just **destined to harm business relations between the U.S. and India**. CIO.com contributor Stephanie Overby explains what’s really going to happen. www.cio.com/article/499907

Stop Copying Me

CIO.com Staff Writer C.G. Lynch is **begging Facebook to stop trying to be like Twitter**. Since its acquisition of FriendFeed, Facebook is now encouraging its users to go more public with their lives by creating a real-time search engine and pushing content out to blogs on publishing sites. But, argues Lynch, “Twitter is the place to interact with the global community, whether at a bar, an inauguration or a protest. Facebook is for the people you’d invite into your home or to your backyard BBQ.” advice.cio.com/node/8527 ▶▶▶

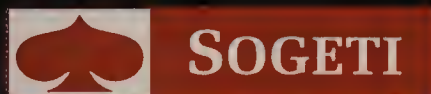
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FROM THE
**PUBLISHER
EMERITUS**

Redefining "Work"

There are two common ways to pay workers in America: give them a salary or hourly wages.

CIOs—and the majority of tech staff—are salaried workers. As The Great Recession winds down, businesses probably have added more hourly paid workers to their payroll in an effort to control costs. But that could pose a future headache for you.

The Fair Labor Standards Act of 1938 remains the de facto definition of "work" for hourly employees. It's almost a laughable definition. Hourly work in America remains defined as beginning when a worker puts on a uniform and ends when the uniform comes off.

Seventy-one years later—in our highly mobile work environment where an hourly-paid employee's uniform could easily be a pair of pajamas—the 1938 definition of "work" no longer works.

Why should this be a concern for you?

Two high-profile court cases focused on hourly work are getting a lot of attention: *Agui v. T-Mobile USA*; and *Rulli v. CB Richard Ellis Inc.* Each case addresses complaints of hourly paid workers who must continue to work after hours on company-issued cell phones fielding service calls and tech-support issues. And they're not getting paid for their extra efforts.

When you peel away the visceral comments from Internet posters on the issue, two sensible themes resonate:

First, hourly workers often don't mind working the extra time because they like the freedom of being an hourly worker. Some days are slower than others.

Second, the smart way to navigate around this potentially dicey issue is to create a cogent human resource policy about after-hours use of company-issued cell phones by hourly paid employees. Having a policy on the books, most people claim, is the best defense from pesky lawyers.

Do you have hourly paid staff? How many have company-issued cell phones? Are they required to use that cell phone after hours? Does your company have a policy in place to handle compensation—or lack thereof—for hourly workers who put in more than eight hours a day?

Let's work on this issue together. Send me your comments about and tell me about your company's policy. I will take your thoughts and start a blog on CIO.com airing your ideas later this fall.

Gary Beach, Publisher Emeritus
gbeach@cio.com

►►► **Chatter** Continued from Page 6

Open Source Limits?

Many troubling questions have been raised about the limits of open source since the arrest of Sergey Aleynikov, Goldman Sachs' former programming whiz. He's accused of trying to steal its super-fast, high-volume trading code, which is based on an open source application. CIO.com Senior Editor Thomas Wailgum wonders: At what point in the software development process **does open-source code become proprietary software?**

advice.cio.com/node/8538

Want to avoid your own ethics catastrophes? Find tips for providing strategic advice and building systems that help in **"Business Ethics: Steering Clear of Scandal."**

www.cio.com/article/500365

Virtually Disaster-Proof

Most companies virtualize servers to save money, space and time for the business. **HR outsourcing firm The Sullivan Group had another motivator: hurricanes.** Read about their formula for disaster-proof virtualization.

www.cio.com/article/500105

Retiring a Mainframe

After decades of service from a mainframe that kept on chugging, Union Pacific IT leaders knew they had to retire their workhorse. **But how do you get rid of a massive, core technology system without disrupting business operations,** breaking the bank or biting off too much change at once? CIO.com Senior Editor Thomas Wailgum details advice from a CIO who's in the middle of the action.

www.cio.com/article/499537

Compiled by Associate Editor Kristin Burnham. Have a comment about a story in this issue of CIO? Go to www.cio.com/magazine/20090915 or write to letters@cio.com.

Thinking outside the box depends on what's in the box.

Energy demands in today's server rooms aren't simply a matter of costs. They're increasingly impacting day-to-day operations. A recent study found that an estimated half of all businesses have experienced IT outages due to power and cooling issues¹. The entire architecture of the IBM BladeCenter[®] HS22 is designed to give you greater efficiency at every level—from its highly efficient design and Intel[®] Xeon[®] Processor 5500 Series to its advanced management software, such as IBM Systems Director, which actively monitors power consumption, to built-in sensors that optimize cooling. All of which can add up to 93% in energy savings over the previous generation of rack servers. Learn how you can see a return on your investment in as little as three months² at ibm.com/hs22

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¹Source: IDC Market Analysis #215870, Volume 1, December 2008, Worldwide Server Energy Expense 2008–2012 Forecast. ²Return on investment and power savings calculation based on 11.1 consolidation ratio scenario of 166 Intel 1U 2 socket servers to 14 BladeCenter HS22 servers and savings in energy costs, software license fees and other operating costs. Actual costs and savings will vary depending on individual customer configurations and environment. For more information, visit www.ibm.com/smarterplanet/claims. IBM, the IBM logo, ibm.com and BladeCenter are trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the Web at www.ibm.com/legal/copytrade.shtml. Intel, the Intel logo, Xeon and Xeon Inside are trademarks or registered trademarks of Intel Corporation in the United States and other countries. © International Business Machines Corporation 2009. All rights reserved.

UNIVERSITY

Smartphones More Plentiful in 2012

Smartphone sales will pass worldwide PC sales by the end of 2011, according to an RBC Capital Markets report. By that time, shipments of both will be approaching 400 million a year.

Smartphone sales are on the increase, with standard mobile sales decreasing. The trend is pushing PC makers, such as Apple, Dell, Acer and Microsoft into the lucrative arena the report said. *-PC Advisor*

Japanese Firm Pleads Guilty to LCD Price Fixing

Epson Imaging Devices has agreed to plead guilty and pay a \$26 million fine for the company's role in fixing prices of thin film transistor-liquid crystal display panels used in Motorola Razr phones, the U.S. Department of Justice says.

Epson agreed to cooperate with the DoJ's ongoing antitrust investigation into price fixing for LCDs and other monitors. The plea agreement must still be approved by the court. *-IDG News Service*

Decision Favoring Novell Reversed in SCO Unix Case

A federal appeals court last month overturned a 2007 decision that Novell owns the Unix code. The ruling clears the way for SCO to pursue a \$1 billion copyright infringement case against IBM.

In a 54-page decision, the 10th Circuit Court of Appeals said it was reversing the 2007 summary judgment decision, which found that Novell was the owner of Unix and UnixWare copyrights.

The Circuit Court also ruled on other issues in the case and remanded those for trial, including issues around Novell's alleged duty to transfer ownership rights to the computer code in question.

The ruling likely will reopen the company's litigation of IBM, based on a relationship SCO has with private equity firm Stephen Norris Capital Partners. *-Network World*

Amazon, Microsoft, Yahoo Fight Google Books

Three of Google's biggest online rivals have joined the fight against a court settlement that would give Google the rights to sell millions of books on the Internet.

Microsoft confirmed last month that it is joining a coalition opposing the Google deal. Amazon and Yahoo have also joined, according to published reports.

The coalition, called the Open Book Alliance, opposes a settlement reached last October between Google, the Association of American Publishers and the Authors Guild. The settlement would allow Google to display portions of books online and sell digital copies of them.

A court will review the agreement for approval on Oct. 7. The coalition says it is considering whether it will file a challenge to the settlement with the court. *-CNNMoney.com*

Facebook Taps Top Recruits

As Facebook ramps up hiring by as many 200 by the end of the year, the social networking giant is recruiting technical and business leaders from some of the best known firms in Silicon Valley.

The new technical and managerial talent is part of a 40 percent to 50 percent expansion of Facebook staff. Facebook CEO Mark Zuckerberg told Bloomberg that the recession presents an opportunity for the Web's largest social network—and one of techdom's hottest young companies—to scoop up talented engineers and managers. *-BusinessWeek*

Chinese Antitrust Law Could Catch More

More antitrust complaints like the one filed against Microsoft in China last year could target foreign IT companies under draft regulations released by the country, says law firm Baker & McKenzie.

Meanwhile, Dong Zhengwei, the lawyer with Chinese law firm Zhongyin who filed the complaint against Microsoft alleging high prices, said last month that he does not expect a result for another three to five years.

China last year passed an antitrust law that has led to a wave of complaints against Chinese and foreign companies. China raised concerns about protectionism this year when it invoked the law to block Coca-Cola from acquiring a large domestic juice vendor, China Huiyuan. *-IDG News Service*



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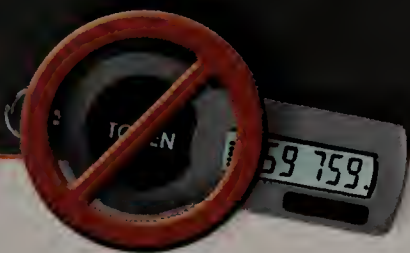
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what we're Reading

Stand Back and Deliver

By Pollyanna Pixton, Neil Nickolaisen,
Todd Little and Kent McDonald

Whether you're leading an organization, a team or a project, you need agile leadership tools to achieve successful levels of performance. This book offers frameworks and step-by-step processes that help you focus your efforts where they matter the most: delivering business value and building competitive advantage. One example: the authors' "Purpose Alignment Model," which details ways to make better decisions about where to invest limited resources. *Addison-Wesley, 2009, \$39.99*



Behind the Cloud

The Untold Story of How Salesforce.com
Went from Idea to Billion-Dollar Company
and Revolutionized an Industry

By Marc Benioff and Carlye Adler

BOOK Find out how Salesforce.com morphed from dotcom start-up to the powerhouse company that has changed the way companies buy, use and develop software. Plenty of tales about guerilla marketing, innovative public relations, getting turned down by venture capitalists and the ultimate moment when Benioff got to ring the bell at the New York Stock Exchange on the day salesforce.com went public. A fun read with plenty of sidebars on strategy. *Jossey-Bass, 2009, \$27.95*

CIO Master and Smart Grid Master

Technology Enabling the Business

By Andres Carvalho

BLOG Hungry for information on Green IT? Carvalho, the CIO of Austin Energy, the ninth largest public utility in the United States, blogs about his company's efforts to build a smart grid while continuing to green his IT shop. In one recent post, Carvalho mused about a world where hybrid cars passing through the Southwest could talk to a smart grid, pass information about vehicle and battery type, set up accounts and be directed to recharging stations after negotiating prices for recharging. Frequently updated and great videos, too.

www.ciomaster.com

Mark's Musings

By Mark Carbone

BLOG Carbone, CIO for the Waterloo Region District School Board of Ontario, Canada, leads an active life in the blogosphere and is mining it for tools of use to educators. Recent posts include using blogging as a way to get students more interested in writing, blogging applications available for iPods and how to use Seesmic, a desktop client that manages your Facebook and Twitter accounts. Thoughtful, enjoyable writing.

markcarbone.wordpress.com

Everything You Ever Wanted to Know About Social Media But Were Afraid to Ask

Building Your Business Using
Consumer Generated Media

By Hilary J.M. Topper

BOOK Afraid to admit that you don't Tweet and are lost when it comes to the usefulness of Facebook, Plaxo, Brightkite, FriendFeed and others? In this breezy manual, Topper, president and CEO of her own public relations firm, HJMT Communications, explains how each service works, and better yet, how you can use it to build your business. So well organized that you could knock it off in a morning commute. *iUniverse, 2009, \$17.95.*

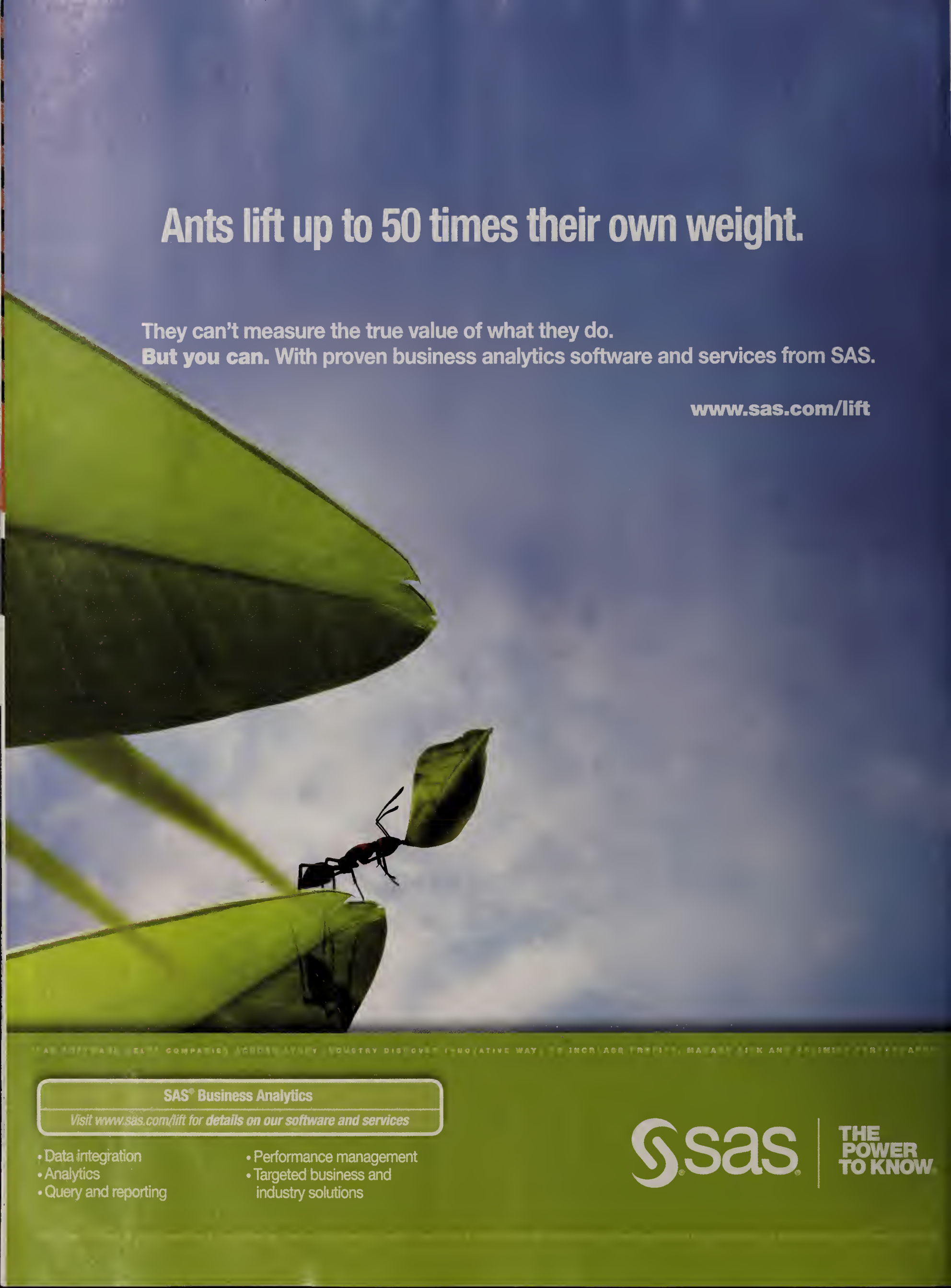
Compiled by Joan Indiana Rigdon. Tell us what you're reading. Go to advice.cio.com/blogs/the_techie_reading_list or write to letters@cio.com.

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A black ant is shown in profile, carrying a small, curved piece of a green leaf in its mandibles. The ant is walking on the edge of a larger green leaf. The background is a clear blue sky with some light clouds. The overall image is a metaphor for strength and the ability to lift heavy loads.

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Lone Star Community College System CIO **Shah Ardalan** won permission to keep money he saves and reinvest it in better services.

15

Ahead of the Class

How Lone Star colleges consolidated services, boosted uptime and funded improvements that support growth **BY DAVID F. CARR**

When Shah Ardalan joined Houston's Lone Star Community College System as CIO in February 2008, its information systems were an embarrassment. Network services were unreliable and the implementation of an ERP system for college administration had a habit of crashing during critical periods like student registration.

Formerly known as North Harris Montgomery Community College District, Lone Star had just rebranded itself as it expanded to become one of the nation's largest, fastest-growing college systems. Under its new chancellor, Dr. Richard Carpenter, it also aimed to be recognized as one of the best. In May, Lone Star won a vote of public confidence when voters approved a \$420 million bond package to support improvements to its buildings and technology.

Part of the new CIO's job was to demonstrate that Lone Star could spend that kind of money effectively. He was charged with leading an IT turnaround that would win the respect of ►►►

►► **Colleges** Continued from Page 15

students and faculty, save millions in wasted spending and also give the new chancellor the data he needed. "We were spending millions each year on technology, but we weren't necessarily focusing those expenditures," Carpenter says. "There was basic data I wanted, and that data was of questionable quality. It was not timely and it took forever to generate."

Ardalan struck a bargain with the Lone Star chancellor and board of trustees. He would attack the scattershot way that the technology budget was being spent. But wherever he achieved savings, he would keep that money to reinvest in improved services. With Carpenter's backing, the CIO also got the board to give him a \$12 million blanket purchase order to improve the procurement process. Once he had the freedom to move quickly—meaning he could promise vendor sales people a purchase order the next day for the right price—"they got very aggressive," he says. One storage equipment vendor dropped its price from \$2.4 million to \$683,600 in return for that speed, among other reasons, he says.

As of July, Ardalan estimates he shaved about \$5.2 million—or more than 50 percent—off what he would have paid vendors at the standard discounts negotiated by the state government.

"Now, nobody remembers the last time the network was down," the CIO says. "That's because we've got full redundancy, with different paths to each of the campuses." Few educational institutions even attempt to deliver those levels of reliability, he notes. But getting there didn't require more money—in fact, one of the key indicators to measure his performance is holding IT expenditures to less than 10 percent of the operating budget.

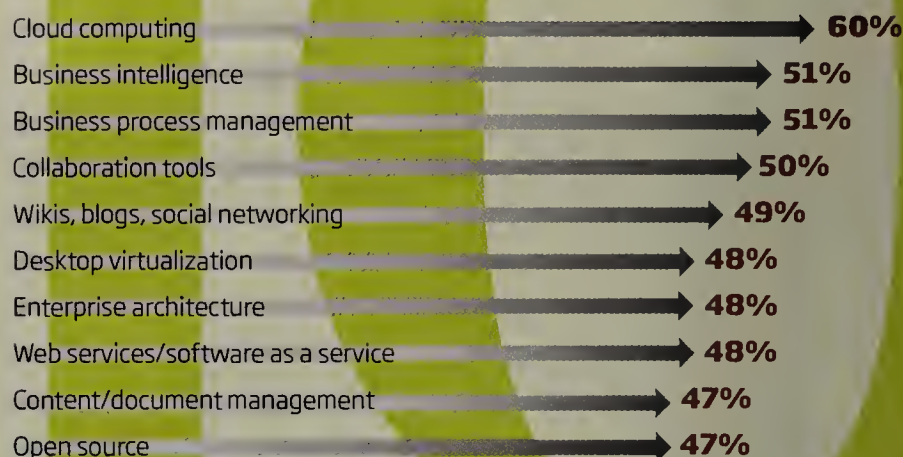
Ardalan singles out one \$1.9 million business intelligence initiative he canceled, which he likened to bringing in an 18-wheeler to move a pickup truck's worth of cargo. There was no demand for such an enterprise-class solution, he says. The colleges hadn't completed prerequisites like data cleansing to make proper use of such a toolset, so Ardalan concentrated on improving the use of the data and analysis tools it already owned. He also took control of previously decentralized IT functions, rationalizing the portfolio of projects and technologies and establishing aggressive uptime goals.

There are still major challenges ahead, the CIO notes. "The investments we've made in infrastructure were to get in the game. Now, we want to change the game altogether."

David F. Carr is a freelance writer based in Florida.

IT's Top 10

What technology decision makers are researching now



CIO RESEARCH

Most Reliable PC Vendors

Rescuecom, a third-party computer repair firm, fielded the fewest support calls to repair Asus and Apple PCs on average. The ratings were based on 11,560 support calls fielded by the company during the second quarter and were adjusted to take into account each PC maker's market share. Lenovo, Toshiba and Hewlett-Packard held the third, fourth and fifth spot, respectively, in the survey.

Companies that provide high-quality components tend to rate higher, says David Milman, Rescuecom's CEO, while bad components and support may force PC owners to call third-party repair companies. Asus is relatively new to the study and is reaping the benefit of the interest in products like netbooks Milman says.

The study was released on the same day as the American Consumer Satisfaction Index. Apple topped that survey with a score of 85, followed by Dell at 75, and a three-way tie between Hewlett-Packard, HP's Compaq brand and Acer/Gateway, which scored 74.

-Agam Shah

.....↑ **16%** Social networking profiles created this year Universal McCann **53%** Executives who focused more on key customers during the recession Economist Intelligence Unit **247,000** jobs lost in July Department of Labor



Mobile Work Is the 'New Normal'

How to gain IT certainty and control with your growing mobile workforce.

Christopher Clark

CHIEF OPERATING OFFICER, FIBERLINK

Wireless Internet is changing how and when people work and how CIOs need to manage their operations. Here, Christopher Clark describes the "new normal" of mobile work and the new operations model for IT management.

What is the "new normal"?

The "new normal" is a world in which mobile workers are treated as the standard, not the exception. The proliferation of mobile devices coupled with the ubiquity of the Internet has created a situation in which IT needs to manage devices and users who are out of the office from 5:00 to 9:00 with the same rigor as when they are in the office from 9:00 to 5:00. A new IT management model is required, with significantly more visibility and control.

What challenges does this mobile new normal create for CIOs?

Candidly, the proliferation of mobile devices and company data in motion are being forced upon CIOs. Risks and costs increase with this productivity gain. It is harder now to ensure cost control, compliance and the appropriate security posture. Delivering effective end user help desk support is more challenging. Even with network access controls, virtualization of data, security applications and strong policies, many potential use cases fall outside the bounds of LAN, WAN and even endpoint configurations. Unfortunately, most organizations don't have the tools to observe or control what is happening on their mobile devices. Essentially, CIOs do not know what they don't know, so they can't strike the optimum balance between productivity and responsible IT management.

Why is increased visibility important in the mobile world?

Visibility provides certainty, and certainty gives you the confidence to make better business decisions. There are many opportunities for the CIO to shine. If you can see that critical patches have been applied and that firewall, antivirus and data encryption packages are up-to-date and running, you can be confident about further unlocking employees from constraints. If you can see that some people rarely use expensive software applications, you can cut costs. If you can see when and how employees are connecting to the Internet, you can give them the right connectivity plans, security configurations and support. With visibility, the CIO will become even more strategic in the company.

Does visibility into endpoints affect compliance?

Certainly. If you lose a laptop but you can prove that it was encrypted, you may be able to save millions in notification costs. Also, industry standards such as PCI DSS and new laws such as Massachusetts 201 CMR 17.00 have significantly raised the bar on requirements for protecting mobile data. Visibility into endpoints can dramatically simplify the process of collecting compliance information for auditors.

How does Fiberlink help companies ensure that mobile workers are sufficiently secure and connected?

Fiberlink offers hosted services that help enterprises protect and control mobile corporate assets and connect them with comprehensive reporting and business intelligence tools. Our services moni-

tor activities on laptops and distributed PCs and provide IT organizations with a "single pane of glass" for viewing the state of software on those devices. We call it "mobility intelligence" (MI), which is akin to BI, but involves tools specific to mobile IT operations. The new normal requires unprecedented breadth in seeing and knowing about employee use of corporate assets and data.

What is unique about the MaaS360 Platform?

I think Fiberlink's MaaS360™ Platform is unique in the way we have thought through how to architect openness and deliver real-time services while streamlining management, improving security and simplifying connectivity in a world where mobile workers are the new normal. We capture the economics of the public Internet while delivering mission-critical mobile operations in a private network model with reporting and workflow tools for visibility and control.

FOR MORE INFORMATION about how Mobility-as-a-Service can reduce costs and protect your company's information assets, download the free white paper "**Visibility and the New Normal of Mobile Work**" at www.cio.com/whitepapers/fiberlink/mobile


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Banking on IT Resiliency

As CIO and CFO of the Federal Reserve Bank of Dallas, Senior Vice President **Meredith Black** positions IT to respond quickly to economic change

grow

18

CHARLIE FELD: The Federal Reserve System has been traditionally decentralized. Has IT been able to gain any synergies?

MEREDITH BLACK: We are 12 independent legal entities with our own IT priorities. Richard Fisher, president of the Dallas Fed, saw an opportunity to improve efficiency and save

How did that new model help you respond to the economic crisis?

There were many business systems that were reaching end of life. They needed to be redeveloped, replatformed and rationalized. We had a joint modernization plan and a new call to action as a result of the economy.

We have had new programs to help inject more liquidity into the economy in a variety of new ways during this crisis. One might be announced on Thursday that had to be made available on Monday morning to financial institutions. It was only because we had agreed on agile development methods and had a modern technology plan that we could deploy the necessary capabilities.

We have also naturally evolved in such a way that different banks are specializing in certain technologies or fields. This has helped us build more depth at less cost than we could have if we all invested in everything. There is no longer any debate about that given our need for a high rate of change and flexibility.

Still, getting to data and turning it quickly and effectively into information is hard. By combining data across business areas we can begin to do analysis in a different way. We think that's our

next big nut to crack.

Also, the analytical cycle has been dramatically reduced from a periodic event to a real-time game.

Exactly. We need to drill into current events to look at causes and effects. Just being able to bring disparate sets of data together to see if there is any correlation among them is very new in many business areas.

Everyone is convinced that the speed of change and the number of variables that can affect our decisions in this global economy require robust management and sophisticated tools.

We've also become a 24/7 operation where e-mail, remote connectivity and BlackBerrys need to be "always on." This has put great pressure on continuous operations and resiliency.

I guess the old cliché of a job with banker's hours has been blown up.

We are like a FedEx—we never sleep anymore.

Meredith BLACK



money and set about changing the IT governance model with his peers. They created the position of system CIO, [held by] Lon Zanetta, to create a larger view and coax the 12 CIOs to cooperate wherever possible.

We formed two councils: one for CIOs and the other for business leaders. Before that, we rarely took a collective view of what we were investing in. That has all changed now.

A member of the CIO Hall of Fame, Charlie Feld is founder of the Feld Group. Read the full article, including more about how the Fed integrated the IT operations of its 12 reserve banks at www.cio.com/article/500766.

Innovation and IT

The path to IT innovation is paved with more than a few potholes. Success requires the right balance of technology and strategic planning.

In an era of tight budgets, growing global competition and game-changing technologies, the ability to innovate is essential. Organizations that put fresh ideas and creative approaches to work on a consistent basis are in a far better position to thrive.

Unfortunately, the gulf between good intentions and results is enormous. A recent IDG Research Services survey of CIOs and IT leaders found that most companies grapple with how to approach IT innovation and put it to work.

Nearly half of respondents report that their companies have failed to achieve the maximum return for their IT investments over the past two years. In fact, only 8 percent say their businesses have realized the maximum possible return on all IT investments.

Why does such a gap exist between expectations and reality? Where do IT leaders typically fall down? And what are the repercussions of operating IT at a tactical rather than strategic level?

The IDG study identifies several problem points, including: managing more with fewer resources; meshing business and IT requirements; coping with project management responsibilities; incorporating metrics into the decision-making process; building credibility for IT; and dealing with budget limitations.

Not surprisingly, the fallout takes its toll on IT as well as the overall business. These organizations overlook business opportunities, develop inefficient workflows, and ultimately suffer from business processes that drain money and resources. All too often, they wind up operating tactically rather than strategically. IT executives admit they're coming up short and many report they're concerned about becoming marginalized.

A primary factor: On average, IT departments devote

80 percent of their budget to keeping systems running, networks functioning, and e-mail flowing. Not surprisingly, a focus on "keeping the lights on" leads to an inability to see the big picture and think strategically.

Other factors also take a toll, however, including: capturing an enterprise view of IT services; keeping pace with the operational upkeep of systems; communicating the value of IT investments in financial terms; and keeping IT projects on time, on budget, and squarely focused on business needs.

In the end, one thing is clear: an organization must move beyond myths and misconceptions to gain an enterprise perspective of IT. Although metrics and KPIs play a major role in building the necessary framework, other tools, such as IT portfolio management (ITPM), unlock innovation in powerful ways. The ability to manage costs and make more informed and transparent strategic decisions typically transforms an IT department—and the way senior executives view it.

Among other things, ITPM delivers an enterprise view of projects and applications across their life-cycles; it creates sustainable processes that capture and display strategic information; it substantiates and communicates the value of IT investments; and it builds flexibility and best practices that ultimately deliver greater ROI.

The result is an ability to thoroughly understand business needs and the role IT plays in building a culture revolving around innovation—and success. With a blueprint in hand, an enterprise can turbocharge performance and profits.

For further results and insight into this IDG Research Services survey, visit www.cio.com/whitepapers/compuware_ITPM and download the free white paper "Innovation and IT."



Windows 7 Hits the Beach

City of Miami drops Vista for early migration **BY SHANE O'NEILL**

Despite the positive reception of Windows 7, many businesses don't plan to deploy it, citing budgetary constraints and compatibility fears. Instead, IT pros say they'll ride out Windows XP as the economy slowly improves. But early adopters of Windows 7 are out there, eagerly looking to utilize the user interface enhancements and "under the hood" networking features.

One such organization is the City of Miami's IT group, which runs 2,900 computers and serves all the city's municipal agencies. This IT shop, lead by Jim Osteen, assistant director of IT, has been testing Windows 7 in its environments since the beta version was released in January and is impressed with the application and driver compatibility, speed and Aero UI features.

Back in October 2008, Osteen deployed Vista for the city, doing so in monthly increments until it was running on 560 machines. He didn't set out to have Vista serve as a transition to Windows, but because Windows 7 application compatibility and hardware requirements are similar to Vista, he expected a smooth transition. ▶▶



PHOTO BY SEBASTIAN KAULITZKI

Two major concerns with any OS upgrade are the learning curve for users and upgrade costs. Osteen says the previous Vista training will help, and plans to do tests with a pilot program to confirm that the transition goes smoothly.

"We created successful training sessions for our clients that moved from XP to Vista," he says. "We'll make minor modifications to that training."

To minimize costs, Microsoft Deployment Toolkit 2010 is being used to automate parts of the upgrade and schedule migrations to coincide with new computer purchases.

"We expect the upgrade costs will be more than offset by increased client productivity and decreased desktop support costs," says Osteen. He'll depend on new UI features such as Aero Peek (a desktop navigation feature), advanced search and Problem Steps Recorder (a tool to aid the help desk in tracking user issues) to improve worker productivity.

"Windows 7 is snappier, and enhancements such as jump lists and the ability to pin items to the task bar will increase the productivity of clients trying to access frequent functions and documents," says Osteen.

Osteen will lean on DirectAccess and BranchCache (both of which need Windows Server 2008 R2, scheduled to be released along with Windows 7, to work) to improve networking for the agency's many users throughout the city.

Additionally, Windows 7 encryption feature BitLocker To Go, he says, will "increase security on mobile computers without increasing our licensing costs, a big advantage in the current economy," he says.

Osteen doesn't expect to rely on Windows XP Mode—a new feature that allows users to run XP-only applications on a virtual machine—but calls it a "good fallback."

Now midway through the deployment, Osteen reports everything is going very well. At press time, 75 machines were running on the final version of the Windows 7 release candidate and they had stopped rolling out new machines while it waits for the official Windows 7 release (RTM).

"About 10 of us have upgraded our machines with the RTM bits over the [release candidate version] with zero issues," he says. Osteen's goal is to keep aggressively pushing Windows 7 on as many machines as possible by its October 22 release date, at which point he'll go back and update the pre-RTM desktops and continue with the rest of the machines.

"We should have over 200 production machines on Windows 7 by the official release date, and we look to have 800-plus machines on the OS by September 2010," says Osteen.

E-mail CIO.com Senior Staff Writer Shane O'Neill at soneill@cio.com. Follow him on Twitter: www.twitter.com/smoneill.

SMARTPHONE SECURITY

Things You Need to Know

By David F. Carr

1

Smartphones share many of the same risks of laptops and are easier to lose. Ajit Arya, deputy CIO for Arlington County, Va., supports both BlackBerrys and iPhones and is working to tighten its policies for managing them.

"We have taken some basic steps," he says. For example, one recommended best practice is to require passwords. So far, the county has told employees they can set passwords but has not tried to enforce it as a requirement, Arya says.

2

The storage capacity of smartphones is growing—and vulnerable. "Your corporate secrets are at risk and will be for a long time," says Jonathan Zdziarski, author of *iPhone Forensics*. Zdziarski says these phones typically leave deleted information in a recoverable state. And some phones now pack gigabytes of storage. Arya says Arlington County addresses this with the ability to wipe phones clean by remote control if they are lost or stolen.

3

Wiping data remotely may not be sufficient. Zdziarski says an information thief can prevent the data wipe command from getting through simply by pulling out the Subscriber Information Module—or SIM card—that mobile phones require for network access. He recommends routinely pruning the data stored on a phone with iErase (for the iPhone) or Data Wipe (for the BlackBerry) to prevent months worth of corporate e-mail and other data from accumulating on the phone.

4

Smartphones need to be managed like PCs or laptops—a recurring theme in Gartner analyst John Girard's list of "10 Smartphone Security Failures You Want to Avoid."

"Companies that do not run a configuration management process will be unable to ensure that their phones are up to date on OS, application and security patches, synchronization and any other desired company policy," he writes.

5

You need a plan for managing smartphone diversity. Girard recommends establishing one or two devices for full corporate use and possibly a second tier for minimal access, such as e-mail only. Many organizations wind up providing "concierge" services to a CEO or other big shot who insists on using a nonstandard device. Just make sure those who force such exceptions are willing to pay the additional costs for networking and support, Girard suggests.

CIO²CEO >Today's IT and Business
Leaders on Market Trends


Connecting to Better Customer Service

Does Your Company Have What It Takes to Succeed?

IT'S NO SECRET that customers exert greater influence over business decisions than at any time in history. And with the Internet at their fingertips, customers can find your competitors easier than ever before. Unfortunately, for many companies, there's a disconnect between objectives and the information technology required to achieve outstanding customer service. Often, the lack of a robust network infrastructure undermines the ability to collect data and make it actionable.

Confronting the Customer Challenge

Outstanding results and excellent customer service don't occur by happenstance. Too many organizations develop a tangle of systems that eventually become a hindrance. A 2009 IDG Research Services/*Fortune* Custom Publishing research study of 258 organizations found that less than one-third of IT executives believe their companies are "highly effective" at adapting to changing customer needs and priorities.

Moreover, less than half of the companies surveyed by IDG report high levels of effectiveness in leveraging technology to handle and respond to customer requests. Many organizations struggle to manage legacy systems and are unable to support multiple customer service channels, including new technologies such as IP telephony and social networking.

Best practices organizations focus on achieving a high level of responsiveness, transforming data into actionable results and developing better products and services based on immediate customer needs. They link technology with business processes to improve workflow. These organizations understand that customer service isn't an end point; it's an ongoing process that's built into the fabric of the organization.

Deconstructing the Disconnects

The IDG survey found that organizations suffer from four major disconnects in the customer service arena.

DISCONNECT NUMBER 1: Customer feedback will drive good decision making.

Listening to customers goes a long way toward tailoring products and services appropriately. In fact, analyzing complaints—along with conducting surveys and research—provides remarkable insights into problems, bottlenecks and breakdowns. According to the IDG study, 68 percent of organizations rely on customer complaints to understand priorities and guide their business.

Success is about
smart and strategic
investments in a
converged IP network
infrastructure.

About CIO2CEO

This peer-based thought leadership program analyzes quantitative and/or qualitative research from actual CIOs and CEOs. The resulting insight is then disseminated via IDG Enterprise and *Fortune* Inc.'s various multimedia assets. To learn more about the CIO2CEO program, please contact Charles Lee at clee@idgenterprise.com.

However, customer feedback reflects a narrow portion of the customer base and a small spectrum of the overall customer experience. The fact that less than 40 percent of the companies surveyed use quantitative metrics to understand customer behavior and patterns doesn't bode well. Best practices organizations understand that there's an ongoing need to tap into multiple data collection sources and provide a three-dimensional view of the customer relationship.

DISCONNECT NUMBER 2: "Tried-and-true" methods of obtaining customer data are adequate.

Treating high-volume, high-profit customers the same as those who buy sporadically has costly implications—particularly in the service and support arena. It's now possible to use business intelligence, data mining and analytics to segment and profile customers in order to understand buying patterns, service requirements and profitability.

Nearly 60 percent of IDG survey respondents indicate that they are looking to monitor customers' experience to improve the way they communicate and collaborate. Today, social networking tools such as Facebook and Twitter provide an entirely different interaction with customers—plus, they offer the ability to monitor discussions in real time, conduct polls and surveys, and react to shifting attitudes and events with zero latency.

With the right interconnected systems, an enterprise can boost revenues, lower business expenses, speed product development, and communicate features and benefits to customers far more effectively.

DISCONNECT NUMBER 3: It's cost-effective to leverage older data, voice, and network services to respond to customers' demands.

In a customer service environment that is increasingly dominated by wireless systems, Web 2.0 technology and unified communications, the lack of a converged network can prove debilitating. Less than half the organizations surveyed by IDG report a high level of effectiveness in using technology to handle and respond to customer requests.

Among the challenges: coordinating efforts between the CEO and CIO; integrating voice and data within the call center; building call switching and transferring capabilities; and integrating CRM into other systems and devices. In fact, more than two-thirds of respondents admit that they are only "somewhat effective" or worse at adapting to current demands.

A converged IP network integrates disparate systems—including old and new technology. The result? A new level of connectedness with partners and customers.

DISCONNECT NUMBER 4: Innovation and rapid response are more related to business processes than to network infrastructure.

Today, businesses deploy wireless point-of-sale systems

anywhere and at any time. These systems pull data from the point of customer contact and use it to guide everything from staffing to inventory on a near-real-time basis. They also use sophisticated algorithms to better understand customer behavior—and even predict future actions. Meanwhile, integrated IVRs (interactive voice response systems), CRM and telecommunications tools route and transfer calls—and the accompanying data—to the right agents. They shift resources quickly to match demand and address customer needs without delay.

In reality, business processes and technology play equal roles in helping achieve success. This translates into ongoing communication between IT and business functions—and an understanding of the business case for various solutions. In the end, the enterprise is able to build bridges between islands of information and connect to customers in a more meaningful way.

Moving Beyond Business as Usual

Not surprisingly, organizations that design a voice and data network infrastructure to support customer needs are more likely to slice through gaps, problems and roadblocks. The results include tightly defined work processes, improved workflow, new insights and an ability to automate tasks. An enterprise finally has a framework for outstanding customer service and high ROI.

These organizations are able to support leading-edge tools, including unified communications, mobile and wireless devices, Web 2.0, and sophisticated data and voice switching. In addition, these companies unleash the full power of interactive voice response systems, CRM and field force automation (FFA), and robust data warehouses and analytics. This state-of-the-art network ultimately reduces costs while enabling the flexibility and agility required to compete in today's global arena.

In the end, success isn't about organizations spending huge sums on the most sophisticated IT systems. It's about smart and strategic investments in a converged IP network infrastructure. With the right pieces in place, an enterprise keeps pace with the ongoing march of technology...and customer demands. ■

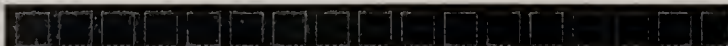
Go to www.cio.com/whitepapers/qwest/service for a free download of the complete white paper "Connecting to Better Customer Service".

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Verify, Then Trust

Offshore vendors can deliver more strategic value than you realize. Here's how.

BY ALBERT ENG

Who do you trust?

That's one of the toughest questions for a CIO to answer when you're designing a road map for large-scale business transformations. You may be integrating a new organization, restructuring the current one, offshoring a portion of your workforce or converting to new technical platforms.

Whatever the project, you know that making the wrong decision could blow millions of dollars in capital investments and quite probably ruin your reputation as an IT leader. But with budget dollars especially limited nowadays, turning to a large management consultancy for strategic help is far less appealing. If you run a typical midsize to large IT organization, you likely have experience working with a mixture of offshore providers. They've invested heavily in higher-level CIO services and are clamoring to be considered as thought leaders.

But how far in the strategic value chain have they really come?

Let's assume you've outsourced some portion of your organization to them already. They know your environment and your people. They've met the mark on services levels and seem to understand your company culture. Increasingly, I find global CIOs who have come to trust their offshore vendors as viable, trusted advisors. But not all of them can offer strategic thought leadership. How do you find the ones who do?

The first step will likely be inside your own peer network, asking around about the vendor's past track record and recent successes. Next, you may want to apply these criteria to determine true strategic capability:

- Assess the vendor's financial command of the business value proposition being discussed. The value proposition should include a detailed forecast of projected savings, efficiencies and/or improvements to business revenue—not

just the cost of the deal.

Find out if their white papers are written by their own practice teams or commissioned by third parties. A lackluster collection of white papers shows a lack of attention to the latest trends.

- Ask to see samples of previous advisory work, which should be completely objective and indifferent to any best-of-breed vendor capable of doing the implementation segment. If your vendor can do the implementation work, that's fine as long as the final report doesn't oversell the follow-on

to make them the obvious choice. That's a separate decision altogether.

- Consider your incumbent vendors first, as they may be thinking more strategically than you realize. Vendors already on the inside should be keenly aware of your needs and able to provide provocative points of view about improving your processes, communications or methods.

- If you are looking to delegate program management responsibilities, evaluate how much political and cultural savvy the potential vendor displays. Ask probing questions about managing the politics and communications required to keep all stakeholders, influencers and detractors well informed.

Finally, be mindful of your preconceived notions about offshore providers. Some CIOs base their decisions on outdated stereotypes of offshore vendors as the bargain-hunter's choice. This is a mistake. Many providers end up squeezed so hard on rates by CIOs in a lowest-price mentality that discussions about that provider's strategic consulting capability never come up.

To find real value for your money these days, consider experimenting with the vendor mix inside your value chain. Shake the tree and see what happens.

Your preconceived notions about offshore providers as merely bargain-basement choices may be wrong.

Albert Eng advises firms on IT strategy, restructuring, offshoring and turnarounds. He can be reached at albert.eng@ccm-itodvisory.com.

LEGAL AFFAIRS

Shared, But Not Alike

When sharing IT services, partners must negotiate to protect their own intellectual property rights **BY CHANLEY HOWELL AND MANFRED PERERA**

In a cross-organization IT shared services arrangement, companies partner to provide shared technology infrastructure or services. While there are benefits to such agreements, there are risks concerning ownership and management of intellectual property (IP) that need to be understood and addressed.

Generally, employers own—or at least have the right to use—IP developed by their employees. If multiple companies are involved, ownership is based on the relationship between the new IP and the core technology of each company. An agreement is necessary to avoid uncertainty regarding each party's rights to use, license, sell and otherwise exploit (or profit from) this jointly developed IP, as well as their respective obligations if the IP is later found to infringe upon the rights of a third party.

The participants in a shared services relationship may decide to form a separate company. In this scenario, they will need to decide upon the percentage of the new company they own, who controls management and who is responsible for day-to-day operations. The parties also need to consider an exit strategy for when the shared ser-

vices relationship terminates, including the sale or distribution of the developed IP assets.

Safeguard Confidential Data

While a shared services group will often develop software or some other tangible product, participants need to resolve how to handle confidential information and trade secrets. Companies that share services should at least require that each takes precautions to protect the other company's information, including such measures as requiring nondisclosure and confidentiality agreements, implementing privacy and security procedures to safeguard pertinent data and educating employees about their obligations to protect such information. Failing to do so may result in loss of protection for what may very well be the most important assets of the business.

Chanley Howell is a partner and Manfred Perera is an associate with Foley & Lardner. They are members of the firm's Information Technology and Outsourcing practice. Read a more detailed discussion of this topic at www.cio.com/article/500883.

25

Job Security: It's What Your Staff Wants

STAFFING A survey conducted by IT research firm Gartner earlier this year pinpointed the staffing conundrum facing CIOs today: It's hard to reward and retain key IT staff who weren't laid off from their organizations when there's no money for raises.

Technology professionals polled by IT job board Dice.com in July have a clear solution to that problem. When asked what companies could offer in lieu of a salary increase to reward and motivate them, the 431 IT pro-

fessionals surveyed indicated they want a sense of stability in a volatile economy or more flexibility.

Survey respondents were asked to choose which one of four reward and recognition options was most important to them: 1) A guarantee of job security; 2) Company-funded training and certification classes; 3) Flexible work hours or 4) C-level recognition.

Slightly more than one-third (35 percent) selected job security as their top choice. Company-funded training and flexible work hours ran a close second and third with 32 percent and 31 percent of the votes. Few IT professionals care about a high-five from the CIO, with just two percent of respondents saying C-level recognition was most important.

Dice.com CMO Tom Silver says he wasn't surprised by the results. "Everyone loves a pat on the back, but relative to the other choices—particularly in a tough market—people are more interested in tangible rewards," he says.

Company-sponsored training, in particular, sends the message that the employer is at least willing to invest in their employees via training, says Silver. Training may also be the best solution to IT leaders' staffing challenges. Says Silver, "They realize they can't hire more people. Therefore, they have to make the most of the technology professionals they have. Investing in their current employees is by far the most efficient way to go." —Meredith Levinson

hotjobs

BY CHRIS
KANARACUS

Java Developer

job description: The Java programming language was originally developed at Sun Microsystems and has since become one of the world's most pervasive software technologies. Java programmers develop a wide range of applications, both on the server side and facing end-users through desktops, Web browsers and mobile phones.

what the application needs to do."

elimination round:

There's "nothing very shocking" about the sort of techniques you should use to make a final hiring decision, according to Van De Voort. "The thing that counts is how closely [your qualifications] meet what I need you to do. These days, employers are really interested in bringing on people who will come up to speed very quickly," he says.

why you need one:

Java's popularity means it lies under the covers of a wide range of enterprise applications and systems. Therefore, skilled Java developers have remained among the industry's hottest properties through the recession, says David Van De Voort, senior principal of IT workforce strategy at the consulting company Mercer. Only SAP and Oracle specialists are in greater demand.

desired skills:

The problem with Java is the breadth of applica-

tions it is used for and the corresponding wealth of tool and platform choices. This can make it challenging to find developers with just the right skills to fit your company. You may have to pay a premium for someone with the skills that best match the position you're filling.

Overall, however, one of the most important traits in any Java developer is "full knowledge and confidence" with the software development life cycle, from gathering initial project requirements to programming, testing and maintenance, says Tom Hart, executive vice president, operations and technology group, with outsourcer Veritude.

how to find one:

Traditional recruiting efforts such as job postings tend to work, but another key tool

is employee referrals, Van De Voort says. Hart agrees. "Getting a good Java programmer to recommend a friend is vital," he adds. Veritude is also mining social networking sites to find candidates.

what to look for:

Like other types of programmers, a Java developer's role "has evolved over the years from a very technical person to someone who also needs a fair amount of business acumen," Van De Voort says.

Given Java's prevalence in outward-facing Web and mobile applications, as well as on back-end servers, the work that Java developers do "tends to be closer to the customer," he continues. "You do need to demonstrate an understanding of the customer interface and work closely with internal clients on understanding exactly

growing your own:

There is no question that Java developers can be trained in-house, in Van De Voort's view. "IT professionals who have been working in other environments, platforms or languages can pick up Java and do it fairly quickly. I see that happening fairly often," he says. Hart says that companies can also grab newly graduated computer science majors and "start training the heck out of them."

**salary
range**

**\$60,000 to
\$140,000**

Redefining call centers

with virtualization

Vikas Kapoor, chief executive officer of iQor,

which operates call centers around the world, is all but convinced he has discovered the key to desktop management. That solution includes thin clients running virtual desktops, with a standard software image distributed daily to thousands of users.

Among the benefits: a roughly 80% reduction in the total cost of deploying and managing each call center seat, flexibility to configure and deploy a call center in a fraction of the time required previously, and a dramatic reduction in the need for desktop support.

According to Kapoor, "Out of necessity, we took a completely different approach to desktop management than anyone else, and a key component is the way we are deploying thin clients."

A new paradigm in using thin clients

After a wave of mergers and acquisitions, Kapoor's IT team was forced to manage many different solutions in far-flung locations, utilizing different hardware and architecture. In order to do that, Kapoor sought out a centralized, standardized, non-PC solution that provided true PC functionality at every desktop.

Needing to configure and deliver a standard image across hundreds of seats, iQor wrote proprietary software alongside HP Image Manager

to boot a single desktop image to multiple desktops. Chris Vida, iQor's senior vice president for IT Infrastructure, and his team engineered a solution in which thin clients—running 20% faster than iQor's former PCs—communicated with the iQor data center and downloaded a standard desktop image with only the executable files required by employees at that specific call center.

At the request of Kapoor, Vida's team took it to the next level by configuring a solution that builds a customized virtual PC every time a user logs in. Now, when a user logs in, the thin client downloads a pristine image with only the applications and data access required by that user, then overlays the user's preferences and permissions.

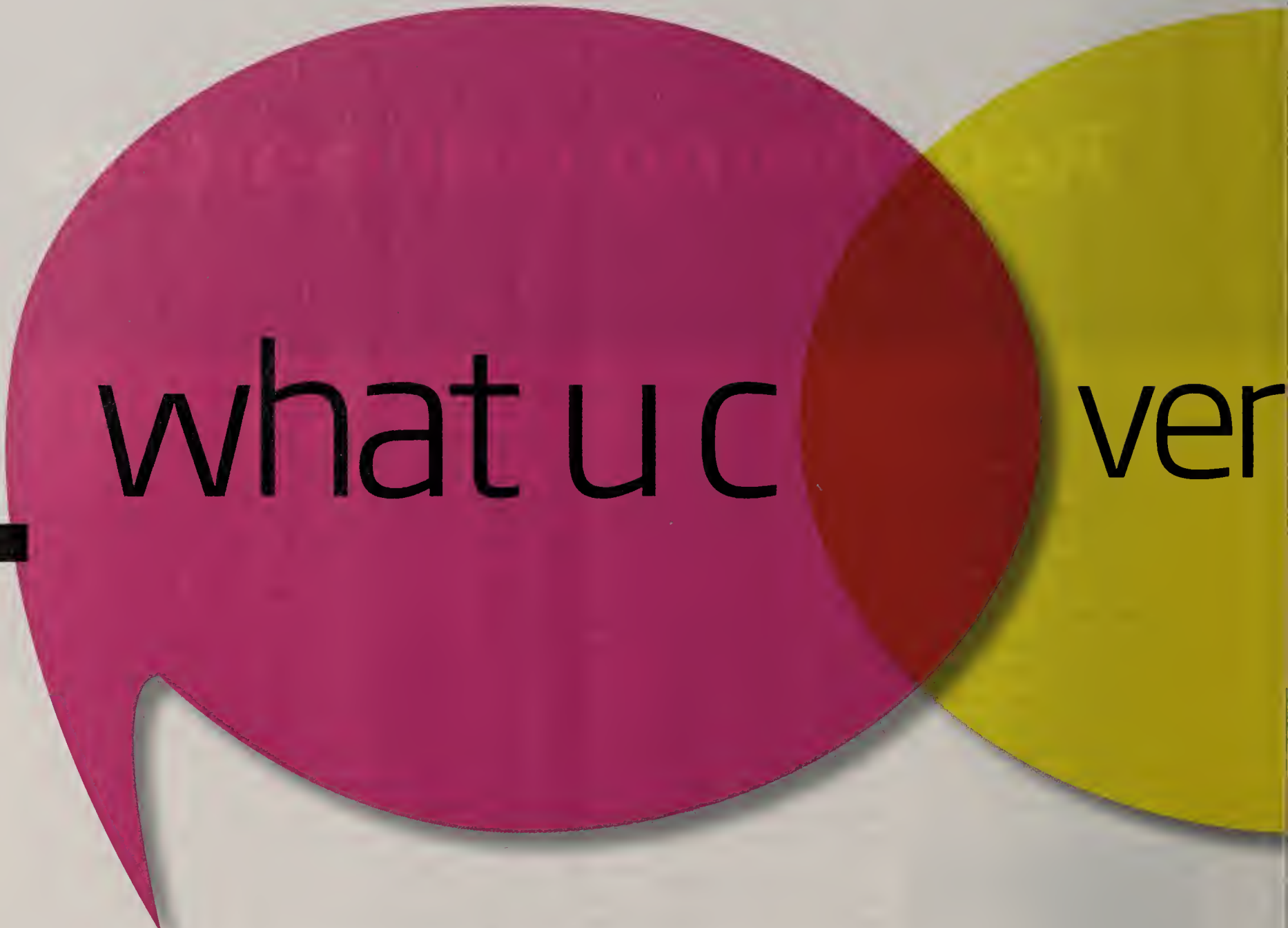
"Enormous" cost savings

The cost savings in this new environment are enormous. Kapoor says the industry average for outfitting a call center seat is roughly \$6,000. iQor does it for less than \$1,000 with thin clients that consume roughly a third less power and produce substantially less heat than iQor's old PCs.

Kapoor is happy with iQor's new thin client solution, saying "You don't need a huge hard drive anymore. We've replaced the boat anchor with a single box the size of a notebook." ■

To download a free white paper on thin client virtualization, go to www.cio.com/whitepapers/hpclient. For more information, visit www.hp.com/go/clientvirtualization.





what u c ver

28

Unified communications

can save time, cut costs and boost collaboration. The tricky part is choosing the right combination of tools.

BY KIM S. NASH



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what u get

29

IT'S HARD TO FIND ANYONE WHO LIKES AUDIO CONFERENCES.

Sure, worker bees can put themselves on mute to chat with fellow cube dwellers. Or play Facebook Scrabble and check e-mail until it's their turn to talk. Yes, for true lows in productivity, the fuzzy, disembodied, dial-in audio conference is hard to beat.

And what about all those mail and messaging systems anyway? Office voice mail, cell phone voice mail, office e-mail, personal e-mail, texting, instant messaging, social media communiques. Make it stop, you cry!

Unified communications won't do that, but depending on which communications and messaging systems you integrate, UC could make it better. At its most basic, UC makes real-time communication systems, such as instant messaging, share information with non-real-time systems, such as e-mail or voice mail, and runs them over the same network. Ideally, there is one simple interface or dashboard for users to access these systems.

With UC, CIOs aim to speed up communication and collaboration internally and perhaps raise customer satisfaction externally. Using voice over IP to cut the traditional phone bill (the foundation for UC) doesn't hurt, nor does reducing travel costs as employees meet in video or audio chats rather than fly to faraway hotel conference rooms.

About 31 percent of 466 organizations surveyed recently by Forrester have deployed some form of unified communications. Half of those who haven't say they are investigating or piloting UC, up from 30 percent in 2007.

Yet UC isn't on fire this year, as the recession continues to batter IT spending. In Forrester's



Woods Bagot CIO **Nectarios Lazaris** tried at least five unified communications products before finding a set that fit the architectural design firm's needs.

survey, 42 percent of respondents who said they weren't investing in UC cited lack of money or the absence of clear business value to justify the investment.

"Certainly it does make sense to connect voice mail, e-mail and mobile systems," says Jerry Hodge, senior director of information services at appliance distributor Hamilton Beach. "Unfortunately, the current economic situation has limited my aggressiveness in moving forward." The same is true at movie-rental chain Block-

buster and food and beverage maker Shaklee, their CIOs say.

Still, if you have money and want to move forward with UC, early adopters have advice about planning projects and measuring returns.

The Original Social Networking

UC has evolved from a back-room effort to simplify networking by, for example, running data and voice traffic on the same

infrastructure, to applications that let employees share information no matter the device in front of them. Well, almost. We're not quite at the point yet where a BlackBerry, say, can get you into any corporate system and connect you to any colleague. But it's coming, predicts Steven John, CIO of manufacturing company H.B. Fuller.

The rise of consumer social networking platforms such as Facebook, Flickr and Twitter reinforce daily the desire among corporate employees to strip the friction from communicating at work, too, John says. He says he feels that heat and is studying potential UC systems, but he hasn't yet decided on any.

Presence, meanwhile, is moving from a cool, gadgety technology to real corporate tool. That's when computer devices detect each other and indicate the fastest or preferred way to reach the person on the other end. It's like instant messaging for every kind of connection you might make to your corporate network or, if configured for it, the public Internet. One simpler UC move is to integrate voice mail and e-mail so that users can listen to e-mail or read voice mail. Another is to allow instant messaging or document sharing during video conferences.

According to Autodesk VP of Strategic Initiatives Billy Hinnners, the ultimate in video is telepresence technology. Autodesk went whole hog into Cisco's TelePresence system, which involves super high-quality video conferencing that can connect up to 48 locations at once, along with on-screen, interactive

data sharing. Cisco calls it an "immersive" experience—think Star Trek's Holodeck.

Of course, the price for such a system is steep. Autodesk spent \$350,000 to outfit its first six-person TelePresence room. It runs 15 rooms now, ranging from two-person to 12-person sites, and spends about \$10,000 per month on networking costs.

"Cost savings was not a big driver for us," Hinnners says. Rather, the company initially wanted better collaboration between software designers and engineers in the United States and its 1,000-plus software engineers in Shanghai to pump out products faster at an improved quality. Subsequent installations have also been aimed at improving sales communications and efficiency as well as reducing travel and carbon emissions. Employees embraced the technology right away, he says. Time booked in the TelePresence rooms for regular video conferencing has become "a precious commodity."

In fact, if there is any project for which success depends on users rather than IT guiding the planning and rollout, it's unified communications. UC projects are some of the most technical ones that CIOs have to contend with today, integrating data and voice in ways that some IT groups have never done before. But communicating is, by nature, a personal act. Foisting upon people unwanted changes to how they talk and type to each other makes people uncomfortable, says Don Lewis,



Maureen Saponaro
Customer Care
Specialist
SunGard Availability
Services

"Last fall, one of my customers experienced a hurricane. They had damage to their building and their data center, and immediately called SunGard to declare a disaster."

SUNGARD
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president of consultancy Strategic Intersect. "You think all you're doing is taking away someone's phone and giving them another one but you're not," says Lewis. "Changing the button they push to forward a call to someone is hugely disruptive."

Is There a Doctor on the Device?

What you really want are users who push for a UC project, says Michael McTigue, CIO of Saint Barnabas Medical Center.

The hospital group—which provides cardiac services, burn treatment and organ transplant among its offerings—wanted to speed up the time for doctors, nurses and technicians to reach each other. The time-honored pager method was no longer good enough. Indeed, the archaic process of dialing a beeper, hoping the page goes through, waiting for the recipient to get it and call back slowed communications, and therefore reaction time during critical situations, McTigue says.

Fifteen minutes might pass before a physician could reach someone in the telemetry group to order machines to monitor a given patient's heart rate, blood pressure and breathing. "Everyone was looking for a communications vehicle that would give better turnaround time," he says.

Walkie-talkies, while quick, didn't pan out because the crackly speakers made the hallways noisier and they ran through a lot of batteries.

In March 2007, Saint Barnabas launched a pilot of Vocera Communication's badge devices. The 2-ounce rectangles are worn on a lanyard around the neck or clipped to a collar or pocket. They allow hands-free voice communication. A nurse might press the activation button and speak into it the name of a physician who is needed to check a medication order. Via a wireless network, the device pings a database to look up the doctor's name and relay the call. The doctor taps his button and speaks to respond.

Saint Barnabas spent \$500,000 for devices and software for 450 concurrent users, starting with the telemetry group. That 15-minute wait time plunged—responses now take nine to 15 seconds, McTigue says. Such dramatic results convinced the hospital to get as many of its 3,000 employees on the system as quickly as possible. Within nine months, the hospital spent \$250,000 to add another 300 concurrent users, giving 2,700 employees access to the system.

IBM managed the initial training, helping new users enunciate and speak directly into the Vocera device. In the emergency room, where there's more noise than in other parts of a hospital, the staff uses headsets rather than dangling the device at chest level. The training helped get Saint Barnabas to a high rate of

UC's Promise Beckons...

413 IT professionals rank the benefits of unified communications technologies:

Increased productivity: **56%**

Faster response time, delivery of information: **48%**

Improved customer service: **35%**

Reduced travel costs: **34%**

Faster decision making: **27%**

Better work/life balance: **18%**

Reduction of carbon footprint: **9%**

Up to three responses allowed

...And CIOs Deliver

Companies that plan to deploy unified communications are moving quickly:

Currently using: **32%**

Will use within one to three years: **31%**

Will use within five years: **4%**

No plans/Not sure: **33%**

CIO RESEARCH



calls recognized and completed on the first try: 83 percent. Seventy percent is more typical, McTigue says proudly.

Along the way, the hospital worked with IBM, Cisco and Vocera to identify and fix wireless dead spots in stairwells, elevators and the lead-walled radiology area. They had to fiddle with wireless access point configurations to get all areas hot. "If you don't have tight infrastructure, the application will get a bad name," he warns. The system works only on campus but the hospital is testing a Vocera smart phone with the same capabilities for off-campus use.

Yearly operating costs are \$75,000 to \$85,000, mainly for Vocera software maintenance, he says. The hospital expects to connect 1.5 million to 2 million calls through the system, eliminating the need for one full-time switchboard operator, according to McTigue.

The hospital has saved another \$70,000 by getting rid of its backup phone system used during power outages. The wireless Vocera system replaces a traditional dedicated circuit for that old emergency system.

Payback from UC projects doesn't typically come from sav-

ings on networking equipment because those prices are low already, says Lewis of Strategic Intersect. But hard returns can be calculated: Obviously, meeting virtually can cut travel costs. Setting up call center staff to work from home, but access integrated voice, e-mail and document capabilities frees up physical room at the company for other uses.

Softer results, Lewis says, can also be important: By merging voice mail, e-mail and BlackBerry messages, your sales organization may save 30 minutes every day. How valuable is that in productivity and morale?

Try It, They'll Like It

As the experience at Saint Barnabas shows, unifying the communications for lots of people at a company can be more beneficial than unifying communications for only some people. The more people on the system, the faster and more frictionless their communication. In a hospital, that can save lives. At a corporation, that can make money.

Woods Bagot, an architectural design firm with offices in Dubai, Hong Kong and London, among other cities, has built elaborate buildings worldwide. Recent projects include the oval dish-shaped campus of the United Arab Emirates University, a

mixed residential and commercial district in Shenzhen, China, and the Cesaria beach resort in the Cape Verde islands.

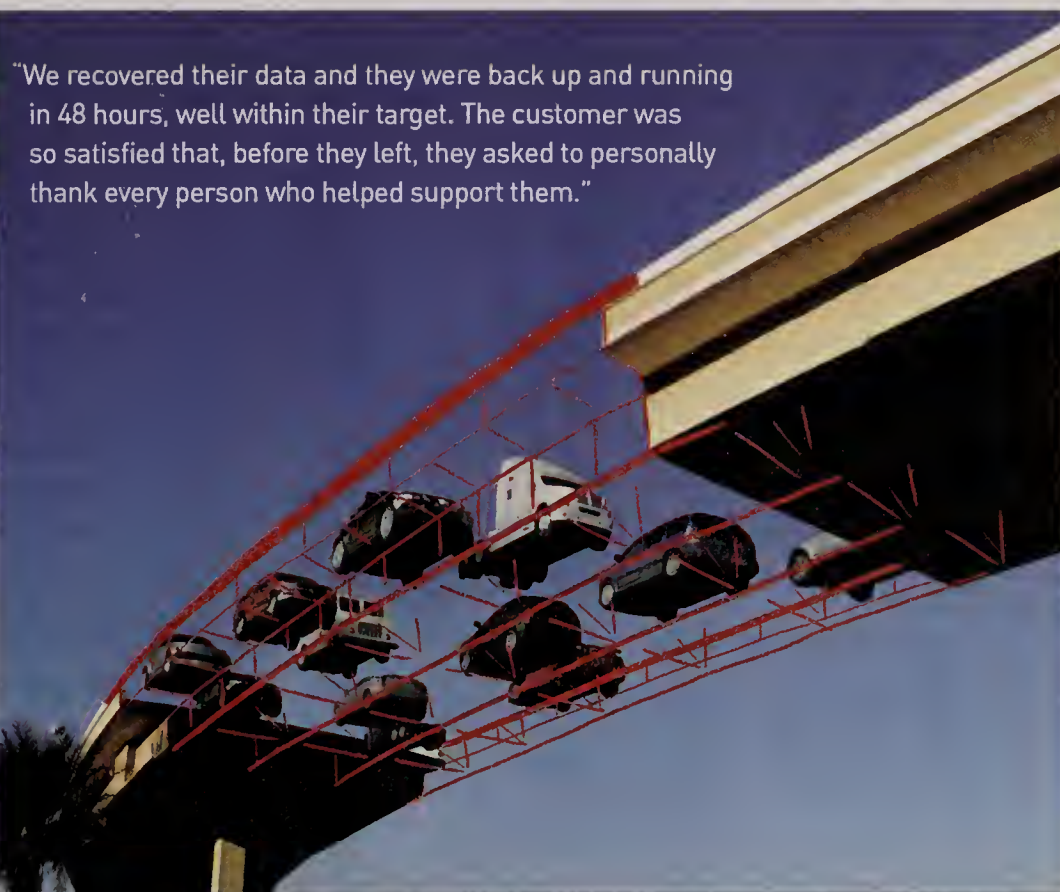
In 2007, the board at Woods Bagot decided that it wanted the company to operate like one big studio no matter where its clients, engineers and architects lived. Exchanging drawings is key for an architecture firm, of course. But the people who work at Woods Bagot are visual thinkers, so any new communica-

Some organizations aren't seeing the returns they expected on UC projects. Or rather, they don't know how to tie a dollar figure to them.



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tions tools would have to let them see each other, not just share data and documents, says CIO Nectarios Lazaris.

"Being a design firm, we don't sit in a boardroom and look at Excel spreadsheets," he says. "We walk around and interact with people." Not to mention swap 3-D visualization files that are a couple of gigabytes unto themselves.

He tried at least five products, including Microsoft Live Meeting, whose video quality users found poor. Same with Polycom's Web conferencing product, he says. Lazaris chose Microsoft Office Communicator for desktop video conferencing and collaboration, products from Tandberg for boardroom video conferencing and Blue Coat's software for secure Web connections. He was impressed that Blue Coat sent engineers—not salespeople—to Woods Bagot during the decision phase and let them stay as long as needed during and after launch.

The first test came when a week after the video system went live, the Woods Bagot board opted to try the new toy instead of meeting in person. "It was a nervous time for us," he says, noting that Blue Coat had people on-site to troubleshoot should something go wrong during the pivotal meeting. The company saved \$450,000 by not flying the 12 board members to Sydney or providing their accommodations for that meeting as well as the remaining ones planned that year, Lazaris says. But it was the experience that sold the board. "When they see their investment in play, that's a bigger win than trying to show them a PowerPoint that says, 'I saved you \$450,000,'" he says.

The technology lets Woods Bagot work with cream-of-the-crop designers and architects residing anywhere in the world, according to Lazaris, which is a point the firm makes in presentations to potential clients. He says it's gotten the firm work it might not otherwise have won. "This is not follow-the-sun like in outsourcing. We're not handing over projects but collaborating in a live environment," he says. "It's comforting to them."

Accessing your calendar over the phone is "fun, fancy, very sexy, but is it needed?"

—Steven John, CIO, H.B. Fuller

How UC Helps IT

The mere thought of coordinating a global supply chain project will send many IT managers quivering under their project management software and spreadsheets. Volvo Group wanted a better way to work across time zones with colleagues who don't necessarily respond to e-mail—however red-hot urgent it's marked, says Magnus Holmqvist, director for the IT innovation center at the company. Volvo Group makes Mac trucks and Volvo busses and construction equipment; Ford now makes the famously rectangular cars.

An IT team of 70 people around the world are working on a project to streamline Volvo's spare-parts supply chain, which reaches 60,000 mechanics in 180 countries. Previously, various team members would meet every 12 weeks to test versions of the new SAP and Red Prairie applications they are building.

Early this spring, Volvo started virtual test rooms online, using Microsoft Office Communicator and Hewlett-Packard's TestDirector quality-check tool running over VoIP.

So far, half of the in-person meetings have been eliminated, but plane trips have been reduced by more than half because the technology is so good, Holmqvist says. Even people in the same city sometimes opt to attend meetings virtually rather than trek across town. He declines to say how much money Volvo has saved in travel costs but says the system has cut carbon dioxide emissions by 630 tons—about the equivalent of taking 250 cars off the road for a year.

Don't underestimate the mileage, so to speak, that you may get from promoting the green ROI of cutting travel, Holmqvist says. "People don't feel too good about flying across the Atlantic when we know we have climate change going on. But people feel much better about eliminating those kinds of meetings," he says. Linking that idea to cost-cutting has helped IT get the new technology more eagerly accepted across the company, he adds. "That is real."

Holmqvist predicts work quality and productivity will rise because employees will spend less time planning meeting logistics and traveling. "Our perception is that we're already earlier on these test-suite sessions. Instead of a 12-week cycle, we may reduce the cycle."

Defining the ROI

Some organizations, however, aren't seeing the returns they expected on UC projects. Or rather, they don't know how to tie a dollar figure to them, says Henry Dewing, a principal analyst at Forrester Research.

The softer benefits of smoother collaboration are hard to quantify and therefore, Dewing says, hard to justify. Especially now. Twenty-four percent of the telecommunications and networking managers surveyed by Forrester say they aren't getting all the benefits they expected from UC. Another 11 percent said they didn't know whether they were or not. It's hard to pin down the dollars generated or saved by faster project completion or product launches, Dewing says.

John, the H.B. Fuller CIO, isn't sure yet what mix of tools will produce the best return. As a \$1.5 billion company, Fuller's revenues aren't huge but its global footprint is. The adhesives company does business in 100 countries, with offices in 36.

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Here's Intel's Eric Heerwagen to explain:

"PCs are under a lot more stress, and we see that in year three, year four, the number of incidents that happen because of failing parts starts to increase significantly and cost IT a lot more money.

"But beyond just the normal wear and tear, there's a change in the way business is done. There's the increased demand for mobility. Workloads have increased as well, as employees deal more with video training or increased emails, doing more complex things inside their office applications. Plus, you've got a down economy which is making folks question whether they need a refresh or not.

"There's the basic value of just refreshing the systems to get the old PCs out of your environment. But add in the goodness of PCs based on Intel vPro technology and Core 2 Duo chips and we can work some really cool magic, and that magic starts with being able to manage and secure PCs, even if they're off or even if the O/S is inoperable."

Add in virtualization-ready features and Heerwagen says "you'll see that in quite a few cases there's actually an ROI payback time of less than a year, which is really compelling to share."

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The pressure is on John to find technological ways to overcome such geographic diversity, he says. But he doesn't want to jump too quickly. For example, it's easier to unify communications when PCs and laptops are standardized, in part because tweaking the configurations takes less time. But standardizing hardware is something Fuller has only recently started to do.

He doesn't want to buy more products than he needs. Say a Fuller engineer in China views a document created by a U.S. counterpart and can hover over his colleague's name with his mouse to automatically dial that person for a PC-based call. How about accessing your computer calendar by voice, over the phone?

That's the kind of razzle dazzle UC application vendors pitch that isn't available in, say, SharePoint, Microsoft's document sharing and collaboration system. "It's fun, fancy, very sexy but is it needed? Would that be a competitive advantage?" John wonders.

One part of the calculation, he says, will be trying to predict how much bandwidth different combinations of UC technologies would eat and whether the network costs will be worth the UC benefits. He hasn't reached any conclusions yet, but a product like SharePoint might provide enough collaboration for Fuller employees so that a big UC investment isn't necessary. "That's what we're debating."

Loomis, the armored car company, has been installing UC components for two years, expecting to cut telecommunications costs and make some business processes more efficient. But first, the company had to lay some infrastructure.

Wayne Sadin, Loomis' CIO, began contemplating UC a few years ago, when the company was outgrowing its existing phone systems. Loomis had acquired several smaller armored car companies along with their mix of different PBXes. If a branch's voice mail needed reprogramming, they had to call local providers who would drive over to do the work for \$100 to \$200 an hour, Sadin recalls.

Loomis replaced those PBX systems at headquarters and, so far, a little more than 10 percent of its 200 branches with Cisco VoIP. Now those tasks can be done by Loomis' own IT staff, centrally. "You just call the help desk. It's 10 minutes of work or even one minute of work," he says. Not paying PBX vendors for move, add or

change orders is a big part of Loomis' ROI, he adds.

In 2007, Loomis finished putting its Microsoft Exchange e-mail system on VoIP. Meanwhile, Microsoft Office Communicator supplies video conferencing, instant messaging and presence, including a BlackBerry IM client. Employees can forward voice mails as if they were e-mail and they don't have to log in to separate voice mail, e-mail and BlackBerry messaging systems, Sadin says.

A Unified Mind-Set

Melding all of these capabilities takes some forethought and, perhaps, changes to how the IT group works together and with outside vendors. When Pacific Medical Centers put in VoIP to let data and voice traffic run unified on its network, it had to rearrange some job responsibilities, says consultant Lewis, who was the hospital's CIO at the time. Network administrators, for example, had to learn to plan for spikes in traffic during peak application usage times as well as for telecommunications.

For many companies, separate vendors supply networking gear, servers and software. But as UC takes root, CIOs and IT staff must make sure those different vendors coordinate their work, he says.

For example, Loomis planned to upgrade Cisco's Call Manager administrative suite last spring, in part to more fully integrate Cisco phone handsets with Microsoft's Office Communications Server.

Loomis' network and server teams planned and tested the upgrade with a local VoIP consultant for two to three months. But the morning of the scheduled upgrade, the teams discovered that the need for a schema change to Microsoft's Active Directory got overlooked. The upgrade was aborted. Loomis tried again in late August, after the Active Directory tweak was tested and rolled out.

"I guess the phone-oriented vendor didn't realize how carefully our server team guards Active Directory from untested changes," he says. "The hardest thing about integrating communications is integrating people's mind-sets." **CIO**

Senior Editor Kim S. Nash can be reached at knosh@cio.com. Follow her on Twitter: www.twitter.com/knosh99.

Goals Gone Wild

Ambitious goal setting can be harmful to your organization's health. Here's how to avoid the pitfalls. **BY STEPHANIE OVERBY**

"Give me a stock clerk with a goal and I'll give you a man who will make history," James Cash Penney, founder of the now-famous chain of eponymous retail stores, is reported to have said. "Give me a man with no goals and I'll give you a stock clerk."

For decades, business schools have extolled the virtues of goal setting—the more audacious the better. Entire corporate cultures have been built on the merits of setting towering targets for performance. After all, throughout history, setting lofty goals has led to landmark success. What was the moon landing 40 years ago if not a stretch goal amazingly achieved?

But contrary to popular opinion, goal setting does not always yield positive results. Quite the contrary, in many cases, says Maurice Schweitzer, associate professor of operations and information management at the University of Pennsylvania's Wharton School of Management.

Look no further than today's more besieged American industries, cars and financial services. Many of their problems can be traced not to goals met, but to "goals gone wild," Schweitzer says.



ILLUSTRATION BY ALISON SEIFFER

Take GM, which once held 28.2 percent of the car and light truck market in the U.S. when management raised the bar to 29 percent. "In trying to reach this goal, employees at GM made a series of very costly mistakes," says Schweitzer. "They started to sell cars with no money down to risky buyers. They sacrificed profitability—and prudent management—in the pursuit of a narrow goal."

Setting goals is not inherently bad. When tasks are routine, easy to monitor and easy to measure, it can work. But in other instances, goal setting can degrade employee performance, corrode office culture and motivate risky or unethical behaviors, says Schweitzer.

CIOs can be tempted to set goals for easy-to-measure outcomes alone—number of hours devoted to a project or lines of code written, for example—or to use stretch goals for their up-and-comers. But such goals may have no intrinsic value. And what happens if the future leader doesn't make the mark? "My broader concern is what bad goals do to the organizational culture," says Schweitzer. "If employees routinely write inefficient code or misrepresent the number of hours they worked, these behaviors may [be harmful]."

Employees that think they'll fail may be tempted to misrep-

resent their performance and "once misrepresentation starts," warns Schweitzer, "It may spread."

Dee Waddell, Group CIO of Amtrak calls goal setting "the key intersection point between strategy and execution," but even he admits there's a risk in IT of aiming too high. "The reality is, IT sometimes sets—or agrees to—overly aggressive time lines in delivering new projects, then finds out too late that either quality must suffer or time lines must expand."

One strategy Waddell employs for better goal setting is involving his team in the process. "A favorite question of mine is what they would like to achieve to leave their legacy in their role," he says. "This provides the open environment for my staff to envision the great outcomes they would like to achieve, and then use this as the foundation for creating clear, realistic and measurable goals."

Schweitzer doesn't advise abandoning goals altogether but do think about what you'd like them to resolve, and get employee buy-in. Avoid overly specific goals or those with inappropriate time lines and monitor the process, not just the progress. "Goals work best if people believe they are realistic."

Stephanie Overby is a freelance writer based in Massachusetts.

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Overcoming Remote Stage Fright

The utter lack of audience interaction can make webinars more nerve-wracking than live performances. Here's how to cope. **BY MARYFRAN JOHNSON**

As a card-carrying extrovert, there's almost nothing I like better than being on stage, making sure a room full of people are being entertained and engaged. Years of piano recitals banished my stage fright (talking on stage is ten times easier than performing up there) and the rest fell naturally into place with preparation and practice.

So imagine my distress when I discovered how nerve-wracking a solo webinar performance can be. By the end of it, I was out of breath, twitchy with nerves and having trouble swallowing—like a 12-year-old getting halfway through Debussy's "Claire de Lune" before freezing at the keyboard. (My mother never let me forget that one.)

The assignment had been deceptively easy. Talk for 30 minutes on a webcast about women and IT career paths. Show a few slides, take a few questions at the end. Never even leave my office chair. How could this not be a piece of cake, performance-wise?

What I hadn't bargained for was the deadly quiet, the utter lack of audience interaction. No eye contact. No heads nodding. No "sense of the room"—that vital sixth sense experienced speakers hone to alert them to the audience drifting away.

Worse than the sound of one hand clapping, this was the sound of one voice yapping.

"I've had that same problem of no feedback," says Zack Grossbart, author of an upcoming book on working remotely and a master of engaging Web presentations. "One trick is to have a friend in the audience, someone

who can show up on your IM and tell you things like 'That worked really well!' or 'You're talking too fast!'"

This 31-year-old software engineer has been working with and coaching remote teams at companies like JP Morgan, 3M, Nortel and Hewlett-Packard since 2001. He's currently a consulting engineer working for Novell (remotely from Cambridge, Mass.) and looking for a publisher for his book, *The One Minute Commute*. (Learn more at www.zackgrossbart.com.)

The son of two psychologists, Zack comes naturally to his interest in how humans relate to one another. But it

was his years of working remotely with a team of fellow engineers at Novell that sharpened his grasp of how to bond with an audience when you can't look people in the eye.

He identifies three big mistakes we often make when presenting remotely:

- 1. Assuming** you have everyone's full attention even though you know perfectly well how much Web surfing and multitasking is, no doubt, going on.
 - 2. Preparing** for a remote Web presentation the same way you would an in-person appearance.
 - 3. Failing** to adjust your presentation to the technology available to your audience. What are they seeing in real-time as they listen to you?
- So let's start with number one: holding the attention of an invisible audience.
- "You have to realize that whatever you present, there's no way it'll be more interesting than the entire Internet," Zack points out. "You can't fight it. You have to work with it and pull them back."

I hadn't bargained on the deadly quiet. Worse than the sound of one hand clapping, this was the sound of one voice yapping.



Quick Fix ■■■ More or less?: The popular more-with-less mantra begs the question, "How much more can you do before IT breaks?" Gartner reports that IT staffers are learning to do less with less, while their CIOs aren't so enlightened. The trick is to triage: Figure out what projects are expendable in favor of what is truly important and educate management about the difference.

You do that by “bursting” your content. He recommends you build in something that dramatically snatches back the wandering attention of your listeners every 8-10 minutes. That may be a visual flare of interest on a slide, a sudden jump in your voice level, or a command that everyone click on a link and follow you to a website. Having a friendly colleague planted in the audience, ready to share an anecdote doesn’t hurt, either.

“You’re saying: ‘Wait a minute! Keep looking!’ You’re channeling your inner Steve Ballmer,” says Zack, fondly remembering a clip of the famously hyper Microsoft CEO launching out of his chair to jump around on stage.

So don’t sit there slumped in your chair while presenting remotely. Stand up, move around, project greater energy levels into your voice. Have pictures of friends or family up on the wall so you’re talking to friendly faces, not the void.

On big mistake number two—preparing for a remote presentation the same way as an in-person one—Zack stresses the importance of thinking harder about the audience experience.

How are you connecting to their interests?

“My presentations all start with a ‘Why do you care?’ slide,” he notes. “Many programs [for remote presenting] have a chat window. Can you have people pose questions during the presentation to answer immediately or afterwards?”

Finally, on the number three problem with the varying tech capabilities of your audience, this engineer-author uses a setup with three monitors and systems running Windows and Linux so he can see how his slides are displaying in different environments. As a result, he’s cut way back on animations, going for simplicity and Web links instead.

How I wish I’d found Zack before that fateful webinar. But once burned, twice prepared, right? No wonder I still play “Claire de Lune” with the sheet music in front of me.

As Editor in Chief of *CIO* magazine and events, Maryfran Johnson is always on the lookout for great speakers and good stories. She can be reached at mjohnson@cio.com.

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- A Yes.
- B Nothing says “fun” to me like a wage & hour audit.

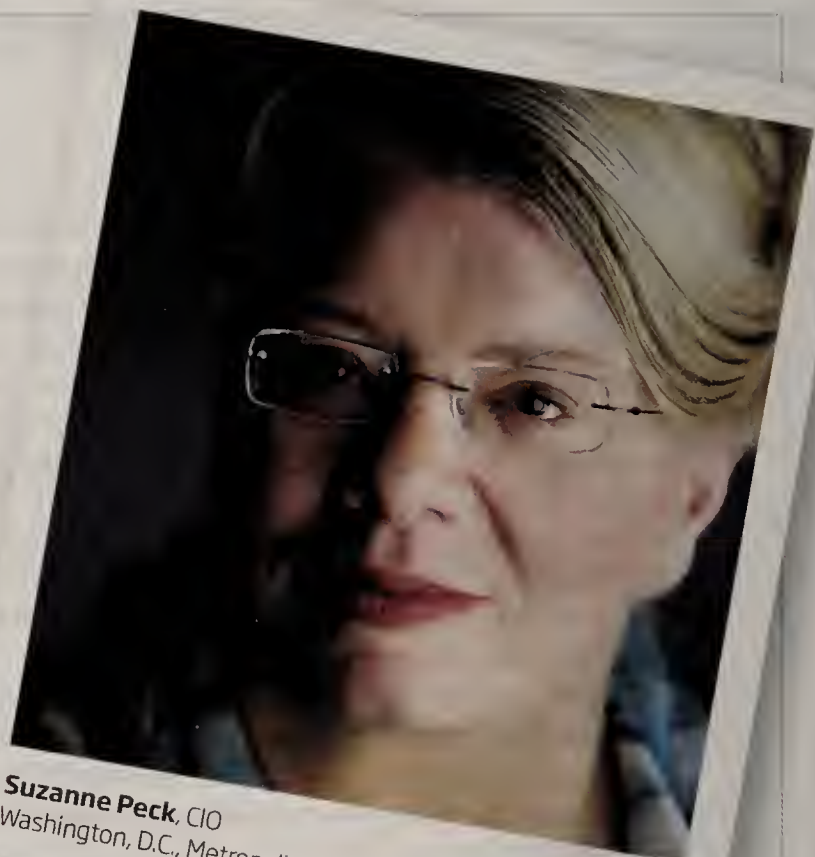
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Public Servant

BY KRISTIN BURNHAM



Suzanne Peck, CIO
Washington, D.C., Metropolitan Area Transit Authority

SomemaysaythatSuzannePeck,CIOoftheWashington,D.C.,Metropolitan Area Transit Authority, is crazy for working 18-hour days. But that's the way she likes it: "I'm a high-energy person who is actually less happy when I'm not busy," she says. So Peck, a native Delawarian, volunteered to spend two days a week leading a pro-bono review of the state's government to identify cost-savings and alleviate its \$350 million deficit.

The project is familiar territory: Peck led a similar, free review of Pennsylvania's government services six years ago, which resulted in \$1.2 billion in recoverable expenses.

"The review that I ran was very successful, and because of that, [Delaware] Governor Jack Markell asked me to do the same in his state," she says. Still feeling a strong bond with the state, with the state Peck was elated to help.

As the review's program director, Peck was tasked with leading a team of 80 volunteers—which included state employees and loaned executives from local companies—in examining all government services to identify savings or alternate revenues that could help balance the state's budget in 2010. This involved reengineering services to be more cost-efficient, examining historic patterns of management and service delivery, identifying effective business processes and redesigning agencies, programs and resources.

The final report that Peck and her team are generating will contain recommendations and legislative requests for the governor to consider. "We're basically looking at all the core services that Delawarians receive, which ones the state can and can't afford, and which are provided efficiently and

not so efficiently," she says. "We're also looking to determine where we can use technology more extensively and more appropriately."

Peck, who has held top IT positions with Sallie Mae and the District of Columbia, says the project is nearing completion, and Markell expects the savings will be substantial. In leading these reviews, she strikes a balance between her business and IT knowledge: "I never look at myself as a technologist only," she says. "The same is true with this performance review: We're running it as business professionals, but I just happen to have a special expertise in technology."

Without Peck and others working pro-bono, the review's price tag would be \$750,000—a tough bill for the state to foot. "We're getting access to a world-class mind on a volunteer basis, which when you're dealing with a budget shortfall as profound as ours, is pretty significant," says Markell. "We're fortunate to have her; she's got such a driving personality to get stuff done."

Associate Editor Kristin Burnham can be reached at kburnham@cio.com. Follow her on Twitter: www.twitter.com/kmburnham.

three-minute coach

Help!

How do I keep my team from getting derailed by social networking distractions?

COACHES: GAYLAN NIELSON and BRENT PETERSON, authors of *FAKE "WORK"* and cofounders of The Work Itself Group.

Always: Ensure that every employee knows what work is critical.

Our research shows that about 50 percent of all work is "fake work," or work that is not directly linked to organizational strategy. Social networking and other

workplace distractions are symptoms of a common problem—workers without clear expectations. Always translate organizational strategies into clear tasks and provide a forum for team discussion and alignment among coworkers. Alignment requires a concerted effort to create ownership, determine task importance, coordinate workloads and establish accountability for results.

Sometimes: Meet and have strategic conversations and reinforce accountability. Use real work tasks—those that are critical and connected to strategy—to manage and monitor performance.

Managers should avoid noticing and rewarding noncritical work. Instead, review the obstacles and resource issues that obstruct real work and let the team help curb social networking distractions.

Never: Assume that strategies are understood and are finding their way into daily work. Managers think they can align people, but employees must adjust and find ways to drive strategies day to day. You can't ignore distracting behaviors, but ultimately you have to focus on monitoring real work tasks and expected outcomes. In areas like IT, exciting new projects often dominate, and strategic links are ignored. Most people don't like doing fake work. They want to accomplish work of value.

Gaylan Nielson and Brent Peterson have been organizational consultants for over 20 years working with Fortune 1000 companies and their subsidiaries all over the world. You can find them at www.fakework.com.

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43

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TIME & ATTENDANCE SCHEDULING ABSENCE MANAGEMENT HR & PAYROLL HIRING LABOR ANALYTICS

GEEK HOTELS

Rooms a Traveling Techie Will Love

By Diann Daniel



Modular High-Tech

High-tech in both construction and amenities, the **citizenM** hotel's founding philosophy is "affordable luxury for the people." (Rooms start at \$110.) Located in Amsterdam at the Schiphol Airport, the hotel offers amenities like self check-in, the ability to store personal room preferences on an RFID key card and free wireless. Rooms also feature a "MoodPad," which guests can use to control shades, temperature and the flat-screen entertainment center. It also adjusts the ambient lighting to create atmospheres from "business" to "relax."



Go to www.cio.com for a slideshow featuring more Geek Hotels.



Minimalist Cool

Roomy it's not. But the **Pod Hotel** offers high-tech lodgings in the Big Apple starting at \$160 a night. The rooms—from townhouse-style studio suites to bunk-bedded rooms with shared bathrooms—are equipped with iPod docking stations, free wireless, LCD-flat screen TVs and voice mail. There's also the Pod Community Blog, which acts as an online concierge and a way to connect with other guests.



J-Pop Décor Meets Tech

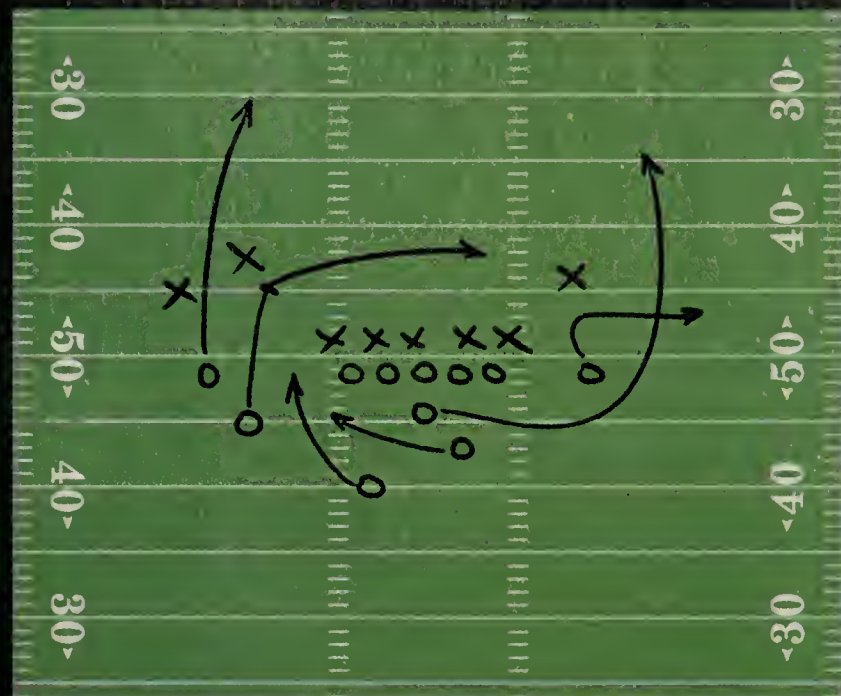
The **Best Western Hotel Tomo** in San Francisco's Japantown shows its anime and Japanese pop inspiration with graphic murals and bright colors. Rooms offer iPod docking stations, flat-screen TVs, free wireless and glow-in-the-dark desk mats. Rates start at \$109; gamer suites run about \$600 but come equipped with PlayStation 3, Wii, a 6-foot LCD projection screen and a mini-fridge equipped with caffeinated beverages to keep you going all night.



The Microsoft Experience

In addition to its room tech offerings, Chicago's **Hotel Sax** provides a lounge to play Xbox games and connect with other gamers via the Xbox Live service, listen to music from the hotel's music library via Microsoft's Zune player or watch HDTV content and movies in a home-theater environment managed by Windows Media Center technology. Some rooms offer the ability to tuck in with Xbox game stations. Rates start at \$182.

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COMPANY INDEX

3M 40
Acer Inc. 10, 16
Amazon.com Inc. 10
Apple Inc. 10, 16
ASUSTek Computer Inc. 16
Austin Energy 12
Autodesk Inc. 31
Baker & McKenzie LLC 10
Blockbuster Inc. 30
Blue Coat Systems 34
CB Richard Ellis Inc. 8
Cisco Systems Inc. 31
citizenM Hotels 44
City of Miami 20
Coca-Cola Co., The 10
Oell 10, 16
Oice 25
Economist Intelligence Unit Ltd. 16
Epson Imaging Devices Corp. 10
Facebook 6, 10, 12, 29
Federal Reserve Bank of Dallas 18
FedEx 18
Forrester Research 6, 29
Gartner Inc. 21, 25, 40
General Motors 39
Goldman Sachs Group Inc., The B

Google 10
H.B. Fuller Co. 31
Hamilton Beach Brands Inc. 30
Hewlett-Packard Development Co. L.P. 16, 34, 40
HJMT Communications LLC . 10
Hotel SAX Chicago 44
IBM Corp. 10, 32
Joie de Vivre Hospitality Inc. 44
JPMorgan Chase & Co. 40
Lenovo 16
Lone Star Community College System 15
Loomis US 37
Mercer LLC 26
Microsoft Corp. . 10, 21, 41, 44
Motorola Inc. 10
National Oceanic and Atmospheric Administration . 48
National Railroad Passenger Corp. 39
Nortel Networks 40
Novell Inc. 40
Oracle 26
Pacific Medical Centers . 37
Pew Internet & American Life Project 15
Pod Hotel, The 44
Polycom Inc. 34

RBC Capital Markets 10
RESCUECOM Corp. 16
Saint Barnabas Medical Center 32
Sallie Mae Inc. 42
SAP 26
Shaklee Corp. 30
Stephen Norris & Co. Capital Partners L.P. 10
Strategic Intersect 32
Sullivan Group, The B
Sun Microsystems Inc. 26
TANOVERG 34
T-Mobile USA Inc. B
Toshiba America Inc. 16
Twitter 6, 12, 31
U.S. Department of Commerce 15
U.S. Department of Labor . 16
Union Pacific Corp. B
United Arab Emirates University 33
Universal McCann 16
University of Pennsylvania . 38
Veritide 26
Vocera Communications . 6, 32
Volvo Group 34
Washington, O.C., Metropolitan Area Transit Authority . 42

Waterloo Region District School Board of Ontario 10
Woods Bagot 30
Work Itself Group Inc., The . 43
World Tourism Organization . 15
Yahoo! Inc. 10
Zhongyin LLC 10

ADVERTISER INDEX

Blue Coat Systems Inc. 2
Citrix Systems Inc. 4
Compuware Corp. 19
CIO 35, 45
CSO 47
Fiberlink Communications Corp. 17
Hewlett-Packard Co. 27
IBM Corp. 9
Intel 36, 37
Kronos 39, 41, 43
Microsoft Corp. C2
NetApp C4
PhoneFactor Inc. 11
Qwest Communications . 13, 22
SAS 14
Sogeti USA 7
SunGard Availability Services . 31, 33
Verizon Wireless C3

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Tsunami Watch

On a quiet July night off the coast of New Zealand, a 7.8 magnitude earthquake snapped the Pacific Tsunami Warning Center to action. The Center issued a regional tsunami warning 19 minutes after the quake, based on its magnitude and depth. Then they waited for the possible wave to reach the DART (Deep Ocean Assessment and Reporting) station in the Tasman Sea. In place since 2008, this detection system consists of an anchored, seafloor bottom pressure recorder and a surface buoy that communicates data to the Tsunami Warning Center on land. Using an Iridium satellite system, two-way communication allows warning centers to change DART's mode from standard to event, initiating a one-minute data exchange rather than the standard 15-minute transfer. Although New Zealand's quake suggested a possible tsunami, the DART buoy recognized insignificant wave amplitude, meaning it was "too small to cause damage anywhere," says Gerard Fryer, a geophysicist at the National Oceanic and Atmospheric Administration's Pacific Tsunami Warning Center. While there are still gaps in the overall detection system, he says, "All in all, we did well with the New Zealand event."

—Simone Levien



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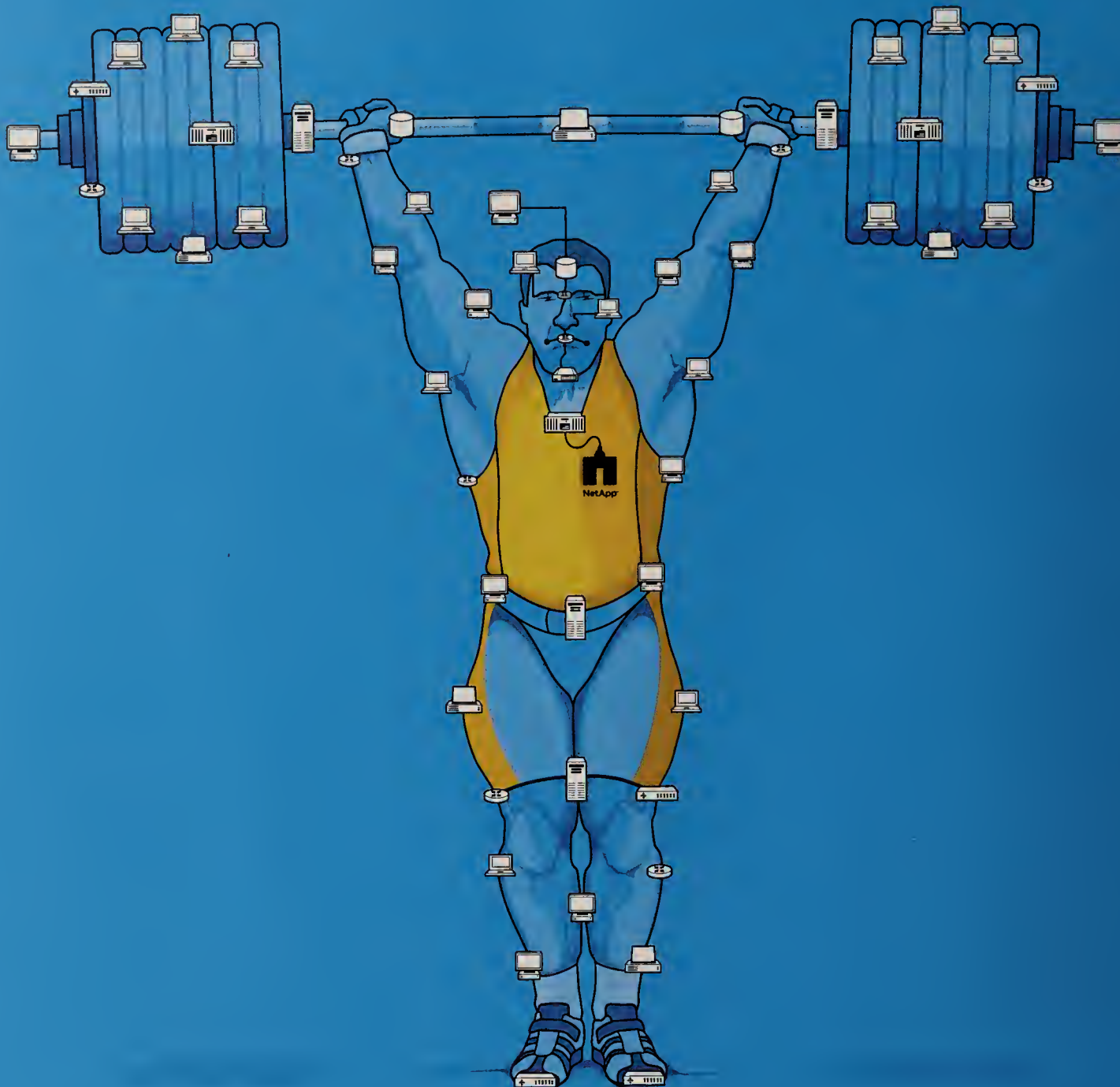
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